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THE FATE OF EMPIRES DEPENDS UPON THE EDUCATION OF YOUTH

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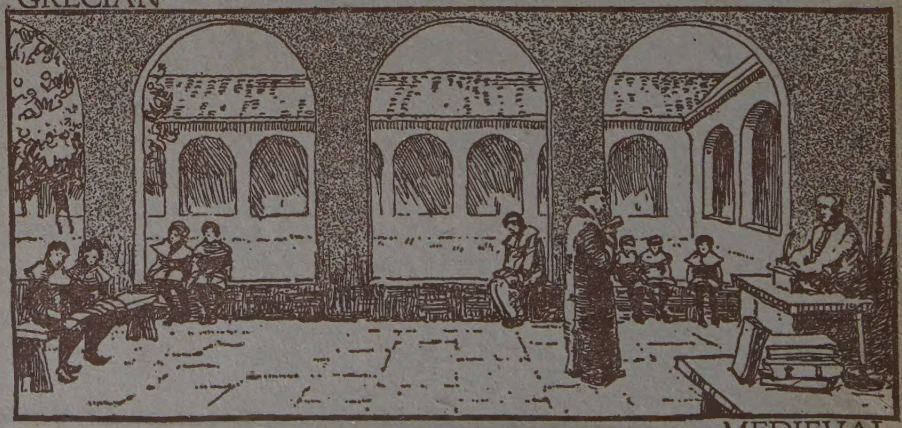

MEDIEVAL

COLONIAL

THE SECRET OF EDU
CATION LIES IN RE
SPECTING THE
PUPIL

EMERSON

PIONEER

MODERN

T. W. STEVENS

PUBLIC SCHOOL METHODS

New Edition

Fully illustrated from photographs, paintings and original drawings

TEACHERS' GUIDE
INDEX

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DEPARTMENTS BY VOLUME

Volume One

Kindergarten; Questions; Primary Reading; Questions; Plans; Primary Language; Questions; Plans; Story-Telling, Dramatization, Games, Songs; Questions; Construction Work; Questions.

Volume Two

Nature Study; Questions; Plans; Phonics; Questions; Number; Questions; Plans; Drawing; Picture Study; Spelling; Penmanship; Questions; Use of the Senses; Questions.

Volume Three

Geography (Primary); Questions; Plans; History (Primary); Questions; School and Environment; Schoolhouse and Grounds; Questions; Organization and Management; Questions; Discipline; Questions; Sanitation and Hygiene; Questions; Work of the School; Questions; Books and Libraries; Questions; Physiology; Questions; Physical Exercises; Character Building; Questions; Music; Special Day Programs (Primary Grades).

Volume Four

Reading; Questions; Plans; Language and Grammar; Questions; Plans; Geography; Questions; Plans; Elementary Science; Interesting Nature Lessons; Questions; Plans.

Volume Five

Arithmetic; Questions; Plans; History; Questions; Plans; Civil Government; Questions; Handcraft; Special Day Programs (Intermediate and Grammar Grades).

Volume Six

Agriculture; Questions; Plans; Construction Work; Questions; Music; Questions; Spelling; Questions; Penmanship; Questions; Adolescence; Psychology; Principles and Methods of Teaching; Questions; Drawing; Picture Study; Questions; Domestic Science; Questions.

The Teacher's Guide and Index

Vocational Guidance; Use of the Dictionary; Community Center; Thrift; Personal and Community Hygiene; Questions; Complete Index.

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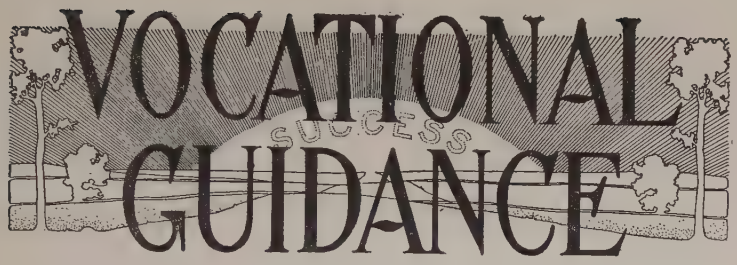
CHAPTER ONE



Archibald S. Bennett
Manager Bennett Publishing Company

INTRODUCTION

The ancient tradition that occupations and trades should be hereditary, descending like other family traits from father to son, receives scant respect in a free Democracy. The modern theory is that anybody may do what he likes, if he can, and that society should ever help him to realize his highest ideal. The facts are that hardly any man in the United States is doing at forty what he had in mind to do at fourteen, and that an increasing number of women are in occupations that did not exist even in fancy when they were girls. Under the circumstances the sanest vocational guidance is that which Mr. Bennett describes — a sort of progressive, immediate guidance, based on the philosophy of a supreme Master; "Sufficient unto *the day* is the evil thereof," and "Now, is the accepted time; behold *now* is the day of salvation." —Henry Turner Bailey.

1. Necessity for Vocational Guidance. The subject of vocational guidance is one of growing importance. Many pamphlets and books have been written concerning it. Nearly every educational convention has a place on the program for a discussion of it. Wide-awake teachers wish to know just what they may hope to do in this new work. This chapter deals with this subject from a new view-point. It is written for

teachers who find themselves in a community too small or too conservative to develop a full-fledged vocational guidance bureau or department.

Much can be said in favor of vocational guidance, for it has many good features, but at the same time it remains to be seen just how much real substantial benefit can be had from this early selection and training for special work.

2. The Vocational Guide. A common interpretation of the term *Vocational Guide* or *Vocational Counselor* is one who helps children and young people to determine their life work, and attempts to counsel them regarding the preparation necessary for the chosen career. Few teachers dare undertake the highly specialized task of acting as an expert vocational counselor. We cannot all tell what each child will eventually do to earn a living, or to win fame, but each of us can help steer our pupils through the difficulties of their daily work. This is the real ever-present problem.

We generally consider the vocational guide as one who assists boys and girls and young people to fix upon a suitable life-work, and to guide the pupil in his preparation for that particular career. We prefer in this chapter to consider the vocational guide as one who assists the boys and girls to solve their present-day problems with a view to the influence of these solutions upon their future careers. Few people in later life find themselves following the career which seemed best for them when children or young people. It is therefore a mistake to try to determine in advance what career a boy or girl shall follow.

The child has its immediate problems to face, difficulties to surmount, courses to choose. It would seem more essential that teachers, as guides, should know very clearly what difficulties are before the child in its present needs and during its next few weeks or months, than to bother about what its ultimate career is to be. Such a plan will enable the teacher to act as counselor at the monemt when the child especially needs a guide.

3. Influence of Specialization. The specialization of indus-

tries in the larger centers leads children to drop into one or another of these industries and become cogs in the great machinery. Most of the unskilled-grade labor in factories, stores, offices and so forth, is city bred. On the other hand, we are all aware of the fact that in nearly every line of industry the leading men are frequently those who have been brought up in small country places or on the farm. In the country, where one sees the handling of the raw material of a great many different kinds of industries, one is more apt to have a broad knowledge of what goes to make up the essentials of life, and with this broader vision to be able to handle larger problems, and thus develop into a leader in some one of the various industries. A teacher in a small community, therefore, may well imagine that the youngsters in her charge are the future leaders in various lines of industry. For her to act in the capacity of guide for these young people is fully as important as to attempt vocational guidance in the larger cities.

4. Promptness Necessary. The keynote of the plan out-lined here is to act as guide always at critical times. *Timeliness* means everything. How to recognize these critical times is half the battle. At the moment when a child must make some more or less important decision comes the teacher's opportunity, and the teacher should ever be alert to sieze upon it. From these seemingly insignificant decisions early in life come the unfortunate missteps or the happy combinations of later years.

It is quite impossible to mention any large part of the important decisions which will come under the teacher's supervision. No classification can be made that will answer all purposes, but it will help greatly if the teacher keep constantly in mind the idea that the immediate problem before each pupil is *the business of going to school.*

5. Leaving School. As we advance from the fifth to the eighth grade the number of pupils constantly diminishes, and less than half of those who finish the work in the eighth grade go to high school. The problem of diminished attendance in these grades is one of the gravest now confronting not only the rural and grade teachers but the superintendents of great

states and cities as well. Its evil effects upon our national life have already become so apparent that measures are being taken throughout the country to induce more of these pupils to remain in school until they have finished, at least, the work of the grammar grades. Practically all states have compulsory education laws which require children under fourteen years of age to remain in school until they have completed the work of the eight grades; but in some states these laws are not enforced and many children are kept from school to work in factories or for other reasons.

Those who have made a study of this problem find the following to be the chief causes for children leaving school before completing the work of the grammar grades:

(a) Occasional Absences. In every district there are families who do not realize the importance to their children of regular attendance upon school, consequently they let them remain at home on the slightest pretext. Mary is needed to tend the baby; John's father wants him to go to the neighbor's and borrow a wrench; Susan got her feet wet yesterday and has a slight cold, or Henry wants to go fishing. Any or all of these excuses seem valid to such parents, and the children, because of their frequent absences, soon fall behind in their classes and lose interest in their work. The complaints of the children because they have fallen behind lead the parents to think that school doesn't amount to much, and they consent to the children's request to drop out altogether.

What can the teacher do? We have already referred to the importance of timeliness.

(1) Every case of absence and tardiness should be satisfactorily accounted for. As far as possible require written excuses, signed by the parent, for absences. If this requirement is clearly understood at the beginning of the term it will act as a check on unnecessary absences.

(2) Make it a point to visit the homes of those pupils whose attendance is irregular, and go over the matter in the most friendly spirit with the parents and pupil. In so doing you will usually lead them to see the necessity of the child's attend-

ing school regularly. If these measures do not bring about the desired result it is sometimes better to call upon the authorities to enforce the compulsory attendance law than to allow the child to remain out of school and grow up in ignorance, a menace to society.

(3) Remember that just as other undesirable habits are formed step by step, so do these occasional absences form the first links in the chain of events which is likely to take the pupil out of school long before he should leave. Use your best efforts to check this tendency when it begins.

(b) Desire for Freedom. There is implanted in the heart of every normal boy and girl a desire to live close to nature, to roam over field and forest, to gather the wild flowers, listen to the sweet songs of birds and with bared head look up into the depths of the ethereal blue and drink to the fill of God's fresh air. Woe be to the teacher or parent who would suppress this desire. It is one of the greatest gifts that we inherit from an all-wise Creator. But this desire now and then is so strong that it takes the boy or girl from school. To such a one the walls of the schoolroom seem like prison bars, and the routine of the daily program is exceedingly irksome. Boys in whom this love for nature is strongly developed are likely to play truant, and if allowed to follow their desires they leave school at an early age.

Every teacher of the intermediate and grammar grades has been confronted with this problem. We admit that its solution is not easy, but in dealing with it there are some things that may be done and others that should be strenuously avoided.

(1) The teacher who is herself a lover of nature and is constantly pointing out to her pupils the beauty and grandeur in the objects about them and showing the bearing these objects and laws have upon the daily work of the school, will seldom be annoyed by cases of truancy. The nature lovers among her pupils will soon learn that they can glean more satisfaction by studying under the teacher's guidance than by roaming the fields and woods without a definite purpose.

(2) Make use of the special knowledge which pupils

of this tendency have, in your nature study lessons. They can secure and prepare the specimens and often can give information that no one else has. Lead them to feel that this talent binds them to the school in a peculiar way.

(3) Encourage such pupils to take a far look ahead. The great naturalists — Agazzi, Darwin, Cuvier, Linneus, Asa Gray and many others — were once boys like themselves; but these men gained distinction because they remained in school.

(4) Do not employ harsh measures with these pupils. A boy who possesses a real love for nature is not a bad boy — he is usually sensitive and he may be timid. If you are to hold him in school you must win his confidence.

(c) Desire to Earn Money. This excuse for quitting school is given much more frequently than any other. Whenever a case of this sort arises the teacher should investigate thoroughly. This investigation will probably show that one of the following causes led to the decision:

(1) A short-sighted ambition to possess money of his own, earned by himself, influenced the boy to place the value of these temporary earnings above that of an education that would greatly increase his earning capacity in the future. Thousands of boys and many girls are lured from school by following this false ideal.

(2) Greed of parents who place the earnings of the child above his future welfare.

(3) Family conditions which may make it necessary for the child to become a wage earner. These cases are usually temporary, and the child should be encouraged to return to school as soon as possible.

Many a teacher has been puzzled with the problem of pupils leaving school to earn money. When the case arises, parents and pupil should be interviewed and the case should be thoroughly discussed. Show the parents that in this age only educated labor is remunerative. We do not mean by this that work with the hands is not remunerative, but that the workman must have received an education and training that will enable him to ply his vocation with intelligence and skill.

It is only in rare instances that the untrained man or woman attains to a remunerative position in the business world, and the chief reason for this is that they have to compete with educated people. Doubtless you will be able to cite to both pupil and parents cases well known to them that prove this statement.

Caution. In these discussions the teacher should avoid saying anything that may cast reflection upon manual labor or the dignity of the laborer. Her duty consists in influencing the pupil to use the opportunity for schooling in such a manner as will enable him to make the most of himself in the future.

(d) Educational Misfits. Many children in their teens feel that there is no connection between the work of the school and the affairs of the home, and especially the great business world. These children feel that they are wasting time, and we must admit that in too many instances there is some ground for their dissatisfaction.

Again, some children have natural aptitudes for certain subjects — as music and art — and they desire to spend most of their time on these. At this age they are unable to look far enough into the future to see that a good general education is necessary to their success in the vocation they wish to follow.

Sometimes the teacher is much more interested in some subjects than in others and presents these subjects in a more attractive manner than the others. Pupils who have little taste for these subjects feel that they are neglected and lose interest in their work.

This source of dissatisfaction is perhaps more easily overcome than any of the others that we have discussed, because the remedy lies almost entirely with the teacher.

(1) In rural districts much will be gained if the environments in the school buildings and grounds are made to resemble more nearly the indoor and outdoor environments of the home and farm in real life. The younger children especially will profit from this plan. The more nearly the two environments — school and home — resemble each other the more real and vital will become the chain of choices made by the students.

Take various examples. First: Have one corner of your school resemble the pantry or cupboard with a stand for the water pail and wash bowl and towels, etc. Have shelves for the lunch baskets. The children can each bring a drinking cup and can be taught how to initial it. Keep these individual drinking cups on the cupboard shelves. Instead of allowing the children to eat their lunches in any old place and throw crumbs and refuse about, show how much fun it is to have two parties — one for the children over ten and one for those under ten — or let each child eat at his own desk, having first procured or been supplied with a rectangular piece of oil cloth with which to cover the top of the desk.

The wash stand might have two little wash bowls — one for the younger folks, or perhaps one for boys and one for the girls. Sweet smelling soap and clean towels will make fun of this part of the day's work. In another corner of the room have a collection of books with one or two easy chairs near by.

Here is an opportunity to impress upon the pupils the importance of cleanliness. The drinking cups, wash bowls and any other utensils in daily use should be washed and sterilized in boiling water once a week, and this work should devolve upon the older pupils, both boys and girls having a share in it. These are some of the things to be enjoyed in common by all the pupils. Beside this make it a point to allow and insist that each pupil have full possession of his desk and chair. Make him responsible at all times for its neatness and general appearance.

Suggestions similar to these can be enlarged upon to make the interior of the room more like the living room at home.

(2) Outside of the schoolroom the shed, if you have one, may be considered first. Provide it with some kind of a work bench and procure a few simple tools useful in carrying out the suggestions in the chapter on *Handcraft*, Vol. V. Have an orderly arrangement for the tools and a systematic method of handling them. Perhaps one of the older boys may be appointed to look out for them and to help instruct those who may be permitted to use them. Have all the wood and

kindling piled away in an orderly fashion. The shed will help take care of the boys on rainy days.

(3) Out in the yard or grounds, always plan to have, at least in the summer, something growing which needs attention, as flowers, young trees, shrubbery, possibly some experimental corn, beans, potatoes, grain or garden stuff—not too much but just enough to excite and hold the interest. In other ways which suggest themselves to you do everything you can to make the outdoor life at school resemble that of the farm and home. Now then, with the children playing, studying, lunching, reading and working in this environment, you must be ever on the alert to help them choose aright. The more real you can make it all seem to the pupils the more real and vital will become the counsel and advice which you give them.

(4) Remember that at home no one ever asks a boy to go out and plow in the pasture just to learn how to plow, for there never is any useless plowing. When he plows his first furrow it counts with his father's work.

The beginner never feeds the stock at odd times just to learn how to feed them. His care is always called for when it is needed. Every bit of work which the farmer's boy does is real and essential. If he can be led to see the realness of his work in school the rest is easy. So it is with the girls. No one asks them to sweep or make beds or set tables or take care of the baby just for practice or to learn how. The things they do are always helpful and useful.

The vital push of necessity is back of it all. In school this can be brought about by increasing the number of things which seem to be a part of the necessary and real program of life.

(5) If after careful work the teacher fails to find a way for the pupil to remain in school, then she should be able to show how he can secure a fairly good education outside the walls of the schoolroom. Night schools and extension courses should be brought to his attention. These remarks, of course, apply to students of any age who are obliged to drop school

work. Do not be discouraged if you fail to win your point. On the contrary, if you win and the pupil decides to remain in school, then special attention should be given to see that with this new attempt at the business of education he gets just returns.

(6) These suggestions have helped to provide the surroundings in which a more careful study can be made of the fundamental likes and dislikes of the child as they become apparent.

Children under ten should be led to acquire habits of neatness, orderliness and thrift, and inspired to be cheerful and happy in their work.

The same is true, of course, of older children, but a more free reign can be given the older ones, followed up by corrective counsel.

At the end of a year or two a teacher who is alive to all of these methods of studying children will begin to detect the underlying desires and ambitions of her pupils. She will observe many of their weaknesses and strengths; with care and skilful piloting she may succeed in leading many of them to think twice before making any choice, and thus by a chain of right choices reach at last a suitable life work.

6. Choosing Studies. There is little to be done in the matter of choosing studies for the lower grades. Most of the work of the younger pupils is carefully planned, and little or none of it can be omitted profitably. In most schools such omission is not permitted, so that no decisions on these questions arise in the lower grades.

However, there are always opportunities to help pupils in coming to a proper decision on certain kinds of studies which they may take up outside of school, or some of the special branches which they take up in school. For instance, music. Whenever a teacher learns that a child is studying music at home, or trying to make up his own mind regarding whether or not he should study music, then arises the opportunity for the teacher to act as guide. The field of music is a broad one, both instrumental and vocal, and the manner of teaching it is important. The amount of work which a young person should

do on music is also a question for careful decision. This applies to music as taught in the schools as well as by private teachers.

Cases of this sort must be settled on the individual's conditions. If, for instance, the pupil has pronounced musical talent, he should be given every encouragement to cultivate that talent, but this should not be done to the neglect of his common school branches, for a working knowledge of these is necessary to his success, let him follow whatever vocation or profession he may.

Another good example is found in the drawing and art and craft work. The pupil may wish to drop drawing work altogether, or he may wish to take up more than the work required. In either case, the teacher should not act without cause or without investigation. Each subject requires different treatment, but with drawing one can explain how it develops the power of observation, and gives a new means of expression. Occasionally a pupil desires to spend a great amount of time on some particular work, as embroidery. This may or may not be a good plan. In such a case all concerned should be brought to realize just what it means.

Careful observation of the pupils under your charge will lead you to discover that nearly all pupils have some special subjects which they like better than others, and most pupils have one or two subjects which they do not like at all. Here again is an opportunity to discuss these matters thoroughly, and if possible, correct distorted ideas regarding these branches.

In a number of cases it may develop that the reason the pupils like subject *A* better than any other subject is because the teacher herself likes *A* better than she does some other subject. If this is the case, the teacher should begin early to correct her own views on that subject.

7. Other Problems. Other classes of problems are always arising, as, for example, the problem of work and play. It is always well to study your pupils to learn whether the time which they spend between play and work is well balanced.

Any habits which you see them indulging in which are detrimental to their health offer an opportunity for you to act as guide. Such occasions as these will come into every pupil's work and will constantly be before every teacher. This gives one an opportunity to do work in the capacity of a guide nearly every day of the school year. Strong emphasis must be laid on the value of timeliness. One should bear in mind that all of this work should be done at the moment of decision, and not in a dogmatic fashion when pupils are interested in something else.

8. Problems of the Eighth Grade. The question of going to high school and of going to work upon leaving the eighth grade, is one of the most important that the boys and girls have to answer. The teacher should be able to assist each of her pupils to make a wise choice. When they enter the eighth grade some pupils expect to go to high school, some are fully persuaded that they will not go and some are in doubt. The eighth grade teacher who ascertains at the beginning of the year to which of these classes each of her pupils belongs can do much in the months that follow to induce those who are undecided, to go to high school, and she may persuade some who were intending to go to work to change their minds and enter high school. This should be done as far as possible.

Family conditions in some cases may be such that the boy or girl is under the necessity of going to work. In such cases the teacher can do much towards helping the pupil prepare for whatever occupation he expects to enter upon by emphasizing the subjects and phases of subjects in the course of study which will be especially helpful, and by directing him in reading along the lines of his chosen vocation. Teachers of this grade should also give frequent talks to pupils on opportunities for education outside of school and show how these supplement the work of the classroom. Before they leave the eighth grade pupils should have developed a taste for good reading and know how to look up for themselves any information they desire to obtain from books.

Teachers of ungraded schools, in which there are boys and girls in their teens, are confronted with similar problems, and they should be a guide to these young people. In rural districts the boys may not look forward to further schooling, and too often the parents do not see the need of it. The teacher of such a school should write the United States Department of Agriculture, Washington, D. C., for bulletins upon agricultural education. She can do much to inspire these young people to continue their education by organizing corn and canning clubs, and by showing the demand for young men and women with scientific training in agriculture.

Opportunities open to young women in rural communities were never better, and the teacher should become familiar with them so that she may be a valuable counselor to her girls.

Each boy and girl who decides to go to work should therefore be given special guidance at this critical time — a time that is full of serious decisions. No matter how small the community, there will be matters of unusual importance to decide. Even should the youngster take up the occupation of his own father, there remains the opportunity to show him the bright side of his chance and to point out the things to be avoided. In rural districts these beginners should be shown the great possibilities of intelligent farming. Many a lad has become a power in his community by taking advantage of the extension courses offered by state universities and agricultural colleges.

In advising these young people concerning the avenues of livelihood and advancement open to them, one should cooperate with parents and others who are interested. It would be well to begin making a file of information gained by these conferences and strive to add to it each term. This would impress children and parents with the means at hand to give really helpful advice. The U. S. Government will supply upon request a list of various publications touching upon agriculture, horticulture, technical trades, trade occupations, education, etc., from which a selection of booklets and

pamphlets may be made suitable for a local bureau of information.

In the case of children who decide to remain in school and take the high school course, the guide's problem is somewhat simplified, but is equally as important. First, all who plan to attend high school should be given a brief explanation of the nature, purpose and value of the work offered, and by simple, graphic illustration the value of the work as a whole and of each course as a part should be explained. In the latter part of the year emphasize the difference between the work of the high school and that of the grammar school, and show the valuable training that the high school gives.

In everything we are more or less dependent. In grammar school we study the geography of a country as we find it without looking very far into the causes. For these we depend on others. In elementary history we do not trace very far the sources from which peoples have come. In arithmetic we count, add, multiply, divide, etc., without looking behind the operations for their reasons. In the study of language we parse and remodel, regardless of derivations. For all these and similar branches we are dependent.

If we go through life dependent on others for the larger part of our equipment we shall never break away from the less remunerative and less satisfactory phases of existence.

If in any business, occupation or profession we are to succeed in a large or even moderately large way, we must know much more about the causes and sources of things.

Deeper study makes us more and more independent and resourceful. The high school courses help to give us this additional power and in this way fit for larger life. Particular attention should be called to individuals in the community or elsewhere who are good examples of the advantages of such equipment.

In this connection it will be well to point out that frequently men who have never taken high school courses succeed in educating themselves through extensive reading and varied

experiences, and thus are able to achieve as much as high school graduates,— but this generally requires more effort and perseverance than is demanded in school. At the same time high school graduates sometimes fail to make the most of their opportunities and thus discredit the value of a better education. Point out that this does not lessen the chance of the energetic boy or girl, but on the contrary gives less competition and therefore a better chance.

An interesting prelude to a discussion of this character can be secured by asking each pupil to write a few paragraphs on "What I think I shall gain by going to high school."

Do not hesitate to discuss these matters freely and frequently with the pupils. Much can be gained all around by such discussion.

In particular, each of the various courses of the school should be fully explained. The required studies of the first year in high school do not differ much, yet even a slight variation of channels will eventually lead to widely different goals, and no pupil should be allowed to choose his course or to switch from one course to another without a clear understanding of the nature and the outcome of his action.

Teachers should make a study of the opportunities of the community and thus be in a position to do some really helpful local guidance. As before the parents and friends must be consulted and interested. Every effort should be made to prevent the pupils from feeling that they leave school helpless and uninformed as to the course ahead of them. Each pupil should know the why and wherefor of every bit of work done and be able to connect it with self-development and with the development of the chosen life work.

9. Conclusion. It is almost needless to say that the whole purpose of this chapter is to show how, by taking heed, the teacher can give the pupil (and his parents) the feeling that he is not sliding aimlessly along through a more or less harmless and practically useless series of exercises and studies which are supposed to be vaguely helpful; but, on the contrary, that he is at all times acting under the direction and guidance

of a guide who knows the difficulties to be encountered, and strives always to enlighten all interested parties.

Now that the whole plan is before us, it is evident that more beneficial work can be done by assuming that the vocation of the youth is to make a business of getting an education, rather than by assuming that anyone's business is to predetermine his final vocation.

Nearly every phase of this work can be strengthened and made to have an accumulative value, both for the school and for the teacher, by keeping card files and records. Each pupil should have a "special history card" that gives in a condensed form the main point of these various moves. This card can be kept as a school record and copies can be made if a pupil transfers or leaves. Matters of this sort are fruitful topics of discussion at teachers' meetings and institutes.

THE GARY SYSTEM

One of the most complete plans for vocational guidance and training in the United States is that connected with the public schools of Gary, Indiana. This city was built by the United States Steel Corporation and is the site of one of its largest plants. Before the steel mills were erected the site of the city was a barren sand waste. Within a decade this barren tract of land had become a city of 40,000 inhabitants. Other manufactories located in the city and the population soon included a number of nationalities. When the public schools were organized there were no deep-seated local prejudices to be overcome, and the Board of Education found in Mr. William Wirt, a man who believed that radical changes should be made in the traditional school systems of American cities. Mr. Wirt was given opportunity to put his ideas into practice, and the result is a system of schools in which the study of academic subjects, vocational training and directed play occupy about equal portions of the pupils' time during eight hours of each school day. This plan is known as the *Gary System.*

In brief the system consists in organizing two schools in one. Eight rooms are considered a unit for such division. Under the old arrangement these rooms would accommodate 320 pupils, forty to a room. Under the Gary plan they accommodate twice that number.

The first division comes at 8 A. M. and has one hour of ordinary school work before the second division arrives at 9. The first division then goes to the shops and the playground for an hour. At 10 the second division goes to the shops and the playground, and the first division returns for another hour's study and recitation in the ordinary school subjects. This plan is followed through the day, which closes at 4 P. M.

Departmental work is done in all grades above the kindergarten, and pupils begin vocational work in the fourth grade. Instruction in shop work is given by experienced workmen, instead of manual training teachers. The greatest freedom is allowed pupils in choosing their industrial work, the idea being that if a pupil chooses to go into the carpenter shop he does it because he thinks he would like to become a carpenter. Over fourteen trades are taught in these schools, and among them the boys and girls are pretty sure to find suitable vocations.

The Gary System makes more complete use of the school buildings than any other, since it conducts evening schools for adults in all the trades and in the common branches, and the buildings are open Saturdays and the auditoriums on Sundays. The advocates of the system claim that it holds a larger percentage of pupils in school until they have completed the high school course and that it sends its pupils out better prepared for active life than do the other systems.

The system has been introduced into some of the schools of New York City. Consult Bulletin No. 23, Public Education Association of the City of New York.

Considering our present industrial conditions, out of which the demand for vocational education has arisen, it would seem that the Gary System points the way to the solution of the problem of enabling the schools to give boys and girls the

necessary knowledge of the branches in the ordinary courses of study, and at the same time to give them a vocational training which will enable them to be self-supporting when they leave school. The Gary System makes a more complete use of the school plant than any other system. It enables the pupils who desire to do so to spend more hours during the week in direct school work, and it holds a larger proportion of pupils in school until they complete a course of study than the old system. With such minor modifications as may be necessary to meet local conditions this system might be successfully introduced into many cities.

CHAPTER TWO

THE DICTIONARY AND HOW TO USE IT

1. Introduction The habit of the intelligent use of reference books is the distinctive mark of the educated man. Without this habit our stock of ideas is from year to year augmented only by the accretions forced upon us by the objective facts of life. Experience may in some respects be the best teacher, but it is an intolerably slow one. With the reference book habit the world of science and letters is at the disposal of the intelligent mind. The teachings of experience are solidified, coördinated, expedited, and often anticipated. With the reference book habit, each day makes its contribution to our intellectual progress; each year's attainment surpasses that of the preceding year; our education is continuous.

2. Alphabetization. Before a child can use any dictionary with facility he must know the alphabet. This does not imply merely the ability to begin at A and recite through to Z. Almost every child who is of the age to begin dictionary work can do that, and any child who cannot, can be taught to in a few minutes. To know the alphabet implies rather such a feeling for the position of the letters that the child will know without the necessity of repeating the letters in order, that, for example, "p" comes before "t," that "d" is in the first part of the alphabet, or that "n" is near the middle. A child should, in other words, know the alphabet as he knows the days of the week or the months of the year. It will be found that not many children have any such familiarity with it, nor is it necessary

that they should have before beginning dictionary work. At the start it is sufficient to be able to repeat the alphabet. If any child is unable to do even this a few repetitions in unison by the class of the old mnemonic arrangement

a, b, c, d, e, f, g,
h, i, j, k, l, m, n, o, p,
q, r, s, and t, u, v,
w, and x, y, z,

will in general be all that is necessary, for the old singsong is very easily remembered. After the dictionary work has commenced it will be found helpful to have in plain sight a copy of the alphabet all on one line, in letters two to four inches high. These can be either printed in chalk upon the blackboard, if there is one long enough, or cut out from display advertisements in newspapers and pasted upon a long strip of paper. The essential thing is that the letters shall be distinctly legible to every child in the room.

(a) Lessons. (1) Once the ability of every child to recite the alphabet is assured, the teacher should give out a series of letters, such as *p*, *s*, *b*, *k*, *v*, *a*, *o*, *r*, *n*, *f*, *r*, *e*, *t*, to be arranged in alphabetical order. When this is mastered, give a list of common words, each beginning with a different letter, to be arranged alphabetically. This should be followed by a list of words beginning with the same letter but having different second letters. *Pray*, *pleat*, *police*, *pygmy*, *pneumatic*, *peace*, *phantom*, *punish*, might form such a list. Follow this with a list in which the first two letters are alike, as *cob*, *coral*, *comfort*, *coin*, *cottage*, *cod*, *cosy*, *coffee*. A list of words having three letters the same, as *subtle*, *subordinate*, *subaltern*, *suburban*, *subject*, *subside*, *subcellar*, *submit*, can next be given. The best way to handle these lists is to write each word on a separate card or small square of paper. By this means the words can be arranged in the desired order without rewriting them.

(2) The alphabetization of these lists will bring the class to the point where they are ready for a general definition, which may be phrased as follows: The relative

position of two words is determined by the first letter in which they differ. This abstract statement of the principle may be made graphic by a few illustrations. Take the two words *precipice* and *precipitate*. Write them one under the other and separate by a line the part that is alike.

precipi | ce
precipi | tate.

Precipice precedes *precipitate* because "c" comes before "t."

(3) With the principles of alphabetization understood, the class is ready for the use of an actual dictionary. Every child should, of course, have a small dictionary for his own personal use. This is such a pedagogical truism that argument is superfluous. Let the class first find the part of the dictionary containing the words which begin with *a*. Nearly every child will know at once that the a's must be at the front of the book. Then have the class turn to the z's, and after that jump around, finding the m's, k's, p's, d's, w's, and so forth. This will be done with considerable facility, for the work up to this point will have given most of the pupils a real feeling for the relative position of the letters in the alphabet.

Specific reference from this time on will be to Webster's Elementary School Dictionary, the book that in most cases is the one selected for beginners in dictionary work.

(4) Have the class open their dictionaries at, say, page 124. In the upper margin will be seen, at the left, the word *conqueror*, at the right, the word *consistency*. Ask why these particular words are put there. One or more of the pupils will speedily discover that *conqueror* is the first, and *consistency* the last, word that is defined upon this page. Any word, then, that is alphabetically after *conqueror* and before *consistency* will be found upon this page. Will *constitution* be found here? It is after *conqueror* {con | queror / con | stitution} because "s" follows "q," but it is also after, and not before, *consistency* {cons | istency / cons | titution} as "t" follows

"i." Therefore *constitution* is not upon this, but upon a following page. The word *consider*, by a similar process, is found to be upon page 124. The class can now be given a short list of words and told to determine the number of the page upon which each one occurs, without stopping to hunt out the actual word. The element of competition in this exercise will prove an effectual curb to the tendency to waste time in finding the actual word. Once a child can determine readily from the key words at the top, upon what page a word will be found, he will without difficulty extend the same principle to the finding of words upon that page. The necessary instruction for the finding of words in the pupil's own (small) dictionary is now complete.

(b) Thumb Index. In most schoolrooms, in addition to the individual dictionaries there will be a large unabridged dictionary. The use of its patent thumb index can be explained by immediate reference to the book itself. On the right-hand edge of the front cover will be found the letters in the first half of the alphabet, from "A" to "M" inclusive. If the word you want to find begins, say, with "G," reach immediately below the "G" upon the cover until your finger catches upon a notch cut in the edges of the pages. Simply pull up with the finger and you will open the dictionary at "G." If a letter in the last half of the alphabet, "N" to "Z" inclusive, is desired, the place can be found from the letters which are plainly visible in the notches upon the front edge of the volume. If the dictionary is already open the position of the letters not in plain sight in the notches is indicated by letters printed on the margin of the page directly above the notches. Additional rapidity in the finding of the word results if mental note is made of the part of the letter in which the word will be found. *Cabal*, for example, would obviously be in the first part of "C," whereas *cyclone* would be near the end. Anyone looking for *system* will be more than two hundred pages nearer in a large dictionary if he opens at the beginning of "T" than if he opens at the beginning of "S."

3. Pronunciation. In teaching children to interpret the diacritical marks used to indicate pronunciation in a dictionary, the teacher will get the readiest response by working from the specific to the general. First take the particular case. How should one pronounce *Sagittarius*? It will be found on page 503, with the pronunciation, as given in parentheses, *săj'ĭt-tā'rĭ-ŭs*. In helping the child to interpret this the teacher should be especially careful to give only such help as is needed. The child is not nearly so badly off as may be thought. If he is left alone, *and not worried*, he will pronounce all of the consonants in the above spelling correctly. The first real difficulty is the ă. Have the class look in the key lines at the bottom of the page until a word is found illustrating this ă. The word turns out to be ăm, found in the first key line of the left-hand page. Have the class pronounce *am*, and afterward pronounce it, "leaving out the m." This gives the ă sound, which can now be applied to the syllable in question, săj. Each of the other marked letters can be similarly found and applied to its syllable, and the word pronounced giving each syllable an even stress (that is, neglecting the accents). Then the teacher should explain that the *heavy* mark, ′, means a *heavy* accent, and the *light* mark, ′, a *light* accent. Use these accents in pronouncing the previously learned syllables, and you have pronounced Sagittarius.

(a) Diacritical Marks. By the use of the key line the child is now in a position to determine the pronunciation of any word in the dictionary. He is, however, wasting a little time on every pronunciation that he looks up, because he does not *know* the diacritical marks. As soon, therefore, as the ability to use the key line is thoroughly established, the memorizing of the symbols used to indicate pronunciation should be begun. The task is by no means so complicated as it would appear at first sight. Upon page viii will be found a table of 64 "symbols used to indicate pronunciation." Some of these the pupil already knows; *b, ch, d, f, h, j, k, ks, kw, l, m, n, ng, p, r, sh, t, v, w, y, z*

will present no difficulty, because used with their ordinary English values. Almost equally plain are *g* ("hard," never like j), *gz*, *hw*, *oi*, *ou*, *s* (never like z), and *zh*. The first thing to be learned is that the long mark (macron) over a vowel, as *ā*, *ē*, *ī*, *ō*, *ū*, indicates the name sound of the vowel. In other words, name the letter and you have the desired sound. A similar mark with a shorter vertical line upon it (*ŧ*) indicates shortening or obscuration due to position in an unaccented syllable. The examples given are *senāte*, *ēvent*, *ōbey*, *ūnite*.

To the memorizing of the other symbols used there is no royal road. The differences between å, ä, â, and ă, or between ô, ŏ, and *ɸ*, require a sheer effort of memory. The problem of learning these symbols is, however, by no means beyond the average school child if he can be kept interested in it. It may prove helpful to some children for the teacher to provide nonsense verses which give the key to the symbols. As an example, å, ä, â, and ă may be differentiated by a jingle like this:

"One dot, two dots, roof and bowl
Ask pa if he dares whack the mole."

The å, ä, â, and ă are found in åsk, pä, dâre, and whăck. Or ô, ŏ, and *ɸ* could be learned from

"Roof and bowl, and crown as well
A lôrd must nŏt write dɸggerel."

Caution. In the process of teaching the use of symbols to indicate pronunciation it is desirable that the teacher should not lose sight of the essential simplicity of the problem. What is sought after is that the child shall be able to pronounce a word after he has consulted the respelling in the dictionary — and this only. The aim is not to teach him tongue positions, or the principles of phonetics, or the analysis of speech sounds. All this may be of value to the teacher, but it is valueless, or worse, for the young child. It is for this reason that the treatise on pronunciation that is such a useful feature of the large Webster's is omitted

from the small ones. The child, who has learned to talk by imitating sounds that he hears, and not by being told how to hold his mouth and manipulate his tongue, can be taught a sound, or its symbol, only by reference to a familiar word in which it occurs. It is quite useless to tell him that ä is a mid-back-wide vowel; tell him that ä is the "a" sound in *far* and he comprehends at once. Why shouldn't he? He has been speaking ä's all his life, like Monsieur Jourdain with his prose. You are not teaching him ä, but identifying it for him.

Let the teacher by all means absorb all the phonetics that he can digest, but let him not suggest phonetic difficulties to the child for the sake of solving them. If the pupil can *use* the pronunciation in a dictionary it makes small difference whether or not he knows a sonant from a surd.

4. Synonyms. The first word in regard to synonyms should be a caution. Distrust any extended treatment that does not justify its distinctions by citations from standard authors. Synonymy has to do with literary and stylistic distinctions of the most subtle kind. No one man, even though he be a Walter Pater, a Stevenson, or a Henry James, can write it satisfactorily out of his own head. On the other hand it is possible, without any reference to actual literary usage, to write synonymy that reads pleasantly and furnishes interesting and striking distinctions. Most of that found in dictionaries is written in just this way. So made it may be ingenious and stimulating; it is true only in spots.

In a large dictionary, then, one ought to demand not only that the synonymy be done by competent men, but also that they support their distinctions, not by manufactured examples, but by citations from standard authors. The synonymy of a small book, where extended citations are impossible, can be trusted only when based on a more extended treatment fulfilling the above-mentioned conditions.

Once the teacher is assured that the class has access to trustworthy synonymy, his next task is to make it necessary for them to consult it. Among the numerous ways of doing this, perhaps the most successful, is that of reconstructing an actual passage from a standard author. The passage chosen should, of course, be unfamiliar to the class.

As an example of this method, take the following lines from Matthew Arnold:

> Nature formed Milton to be a great poet. But what other poet has shown so sincere a sense of the grandeur of his vocation, and a moral effort so constant and sublime to make and keep himself worthy of it?

The second sentence can be given to the class in the following form, with directions to choose in each case the most suitable of the bracketed words.

> But what other poet has shown so [honest, sincere] a sense of the [augustness, grandeur, sublimity] of his [avocation, vocation], and a moral effort so [constant, continual] and [magnificent, splendid, sublime, superb] to make and keep himself worthy of it.

With the reconstruction of this sentence should go a discussion of why one of the alternative words is more suitable than another. At the end, the sentence can be given in Matthew Arnold's own form, and comparison made with the reconstructed versions.

5. The Teacher's Preparation. (a) ENTHUSIASM. The prime requisite of the teacher who is to teach dictionary work is a personal enthusiasm for the "amazing phenomenon of articulate speech." No one to whom words are mere symbols can inspire the pupil with a real and lasting interest in the language that he speaks and reads and thinks.

Teachers who have had linguistic training of collegiate grade will almost certainly have acquired the enthusiasm for words. For the others who have been denied this training there is no single work in English that will be

found so stimulating as *Words and Their Ways in English Speech*, by Greenough and Kittredge. This interesting book will not only give the teacher a new insight into linguistic processes, but will furnish scores of examples of curious etymologies and sense developments that he can from time to time pass along to the student. Upon the subject of words there are also two excellent books in French, both fortunately available in English translations: Darmesteter's *La Vie des Mots*, and Bréal's *Essai de Sémantique*.

(b) The Dictionary Habit. It is important that the teacher should himself have the dictionary habit. One who is willing to slide over strange words in his own reading will hardly be able to induce pupils *not* to do so in theirs. On the other hand there can be no more effective object lesson for a class than to find that the teacher habitually uses the dictionary for his own instruction. It is wholesome also for a class to know that art is so long and time so fleeting that not even the wisdom of the teacher can compass all the knowledge that is in such a book. The teacher will indeed do the class a serious wrong if by any pose of his own he allows it to appear that the dictionary is necessary only for children and beginners.

(c) Conventional Devices. A teacher should be familiar with all of the conventional devices that are used in dictionaries. First among these are conventions of arrangement. Single words are arranged alphabetically. That we all know. Two-word phrases beginning with an adjective will be found after the adjectives. Compare, for example, in Webster's New International, the list of phrases upon page 1667 which follow the adjective *Polish*. Two-word phrases beginning with a noun are put in their regular alphabetical place, that is, treated as if they were single words. Compare *police power* and *policy slip* upon the same page. Phrases of more than two words will be found under the first important word. Compare the long list of phrases under the verb *take*.

(d) Arrangement of Definitions. The arrangement of definitions should also be understood. In almost all

first-class dictionaries (including the Oxford English Dictionary, Webster, and the Century) the definitions are arranged in their historical order, the oldest first. This is done, in the first place, so that the intelligent reader can make an independent survey of the sense development of the word, and, in the second place, because it is the only plan that can be followed systematically and consistently. The historical order can be determined by definite historical evidence; any attempt to arrange the definitions in the order of their frequency in present-day use resolves itself into the whimsical personal preference of the editor.

In hunting for a definition in some particular science or art, advantage can be taken of the fact that a technical definition of any sort is preceded by a label. If a person who has recently bought a camera wishes a definition of *negative* he does not need to read all the definitions of *negative*, n., but can let his eye run down the column until it lights upon the label *Photog.* If he reads that blue vitriol is a *salt* of copper he is on the lookout for the label *Chem.* when he finds *salt*, n. in the dictionary.

(e) Right Use of Words. Another point that the school teacher should bear in mind constantly is that not all words in the dictionary are "good" words in the schoolmaster's sense. When a boy justifies the use of *swipe* in the sense of *steal* because he found it in the "big dictionary" the teacher should have the answer at hand, "But what did you find at the end of the definition?" If the dictionary has been carefully edited this sense is marked *Slang*, thus definitely forbidding its use in anything approaching formal discourse. The proper application of restrictive labels like *Obsolete*, *Colloquial*, *Slang*, and the like, is the only guide the user of the dictionary has as to the present-day status of the word. Even these labels are not a safe guide unless the user of the dictionary knows accurately what they mean. The pupil certainly will not know without special instructions. In the case particularly of dictionaries for school use these restrictive labels are of prime importance.

All of the points about a dictionary that a teacher should know are likewise points that any user of the dictionary will find valuable. The teacher will find, however, that they can be most readily taught one at a time, *as they come up*. The boy who has been denied the use of *swipe* because of the label will in the future beware the labels.

6. Etymologies. Etymology, in many respects the most interesting and least understood feature of a dictionary, is wisely deferred until the later years of the grammar school, or even until the high school. The form in which etymologies are given is so highly conventionalized that the user of them requires no little preliminary training if he is to interpret accurately what he will find in any good dictionary. For the sake, then, not only of the teachers who must teach etymology, but also of every mature user of the dictionary, let us take a few examples, passing from easy ones to some of the more difficult, and turn the concise, conventionalized statements into terms of ordinary speech.

fulcrum [L., bedpost, fr. *fulcire* to prop.]

Fulcrum is from the Latin word *fulcrum*, meaning bedpost, and this in turn is from the Latin *fulcire* to prop. The Latin noun is spelled like the English *fulcrum*, because if it were not, its spelling would be given. Notice that the abbreviation L. (for Latin) at the beginning, applies to *fulcire* as well as to (unwritten) *fulcrum*.

stone [ME. *ston*, *stān*, AS. *stān*; akin to OS. & OFries. *stēn*, D. *steen*, G. *stein*, Icel. *steinn*, Sw. *sten*, Dan. *steen*, Goth. *stains*, Russ. *styena* a wall, Gr. στία, στίον, a pebble. Cf. STEEN.]

Stone, spelled in Middle English *ston* and also *stan*, is from the Anglo-Saxon word *stān*. Here the etymology could end, but because *stone* has cognates (words of similar ultimate origin) in many languages, some of these are given. "Akin to," in an etymology, simply means "is a cognate of." The English word "stone" is not derived from the Old Saxon or the German or the Greek word, but all of these come from a common (unknown) source in the primitive (hypo-

thetical) Indo-European or Aryan speech. Or we can say, borrowing a term from genealogy, that the Anglo-Saxon, German, Dutch, and the other words are collaterally, and not lineally, related. Notice also that in the cases where the meaning of a word is not given it is the same as that of the English word "stone." At the end of the etymology is "Cf. STEEN," which means simply that "steen" is an English word related to "stone."

carpenter [OF. *carpentier*, F. *charpentier*, LL. *carpentarius*, fr. L. *carpentum* wagon, chariot.]

Carpenter is from the Old French *carpentier*, which comes from the Late Latin *carpentarius*, which comes from Latin *carpentum*, meaning wagon or chariot. The (modern) French *charpentier* is inserted merely as a point of additional interest, French being familiar to so many more people than Old French. *Charpentier* is not an ancestor of *carpenter*, but a brother.

explode [L. *explodere*, *explosum*, to drive out, as a player by clapping; *ex* out+*plaudere*, *plodere*, to clap, strike, applaud: cf. OF. *exploder*. Cf. PLAUDIT.]

Here the difficulty lies in the direction to "compare Old French *exploder*." This means that while the English word came from the Latin, the immediate source may have been Old French *exploder*, which itself comes from Latin *explodere*.

salary [L. *salarium* pension, stipend, orig., salt money, the money given to the Roman soldiers for salt, which was a part of their pay, fr. *salarius* belonging to salt, fr. *sal* salt: cf. F. *salaire*. See SALT.]

Notice that the sense development of this word was largely completed in Latin, before it came into English or into French. The reference "See SALT" directs the reader to the cognate native (Anglo-Saxon) word where will be found a list of cognates in various languages.

flourish [ME. *florisshen*, *flurisshen*, OF. *flurir*, *florir*, F. *fleurir*, fr. L. *florere* to bloom, fr. *flos*, *floris*, flower. See FLOWER, 2d -ISH.]

The thing to trouble us is how the Middle English came to have *-issh-*. If we look up the second suffix *-ish*, as directed at the end of the etymology, we shall solve the problem. We can summarize what we find under *-ish* by saying that the *-ish* in flour*ish*, cher*ish*, and similar words is due to an *-iss-* in certain forms of the French verb ending (in the infinitive) with *-ir*. Compare *fleurir* to flourish, *nous fleurissons*, we flourish, *fleurissant*, flourishing. The French *-iss-* is itself due to the same Latin inchoative suffix that is found in Latin *dormisco*, I fall asleep (from *dormio*, I sleep).

apron [ME. *napron*, OF. *naperon*, F. *napperon*, dim. of OF. *nape*, F. *nappe*, cloth, tablecloth, LL. *napa*, fr. L. *mappa*, napkin, table napkin. The initial *n* was confused with the *n* of the indefinite article. See MAP; cf. NAPERY.]

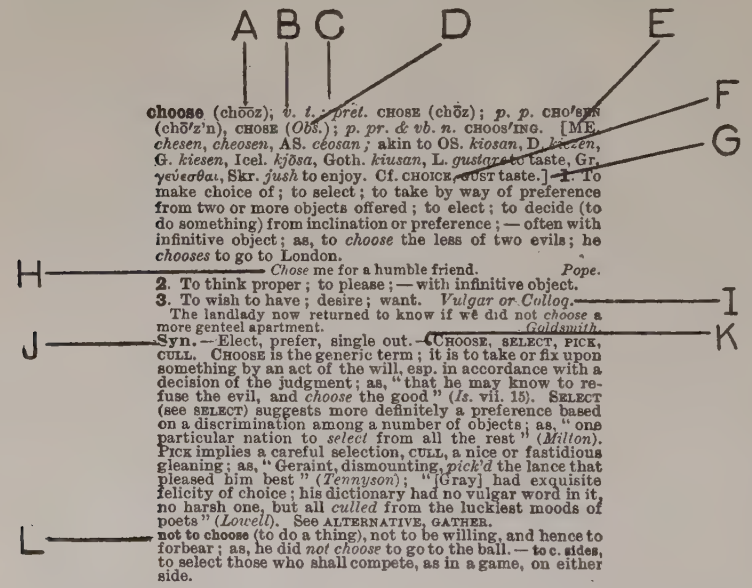
The second sentence may cause trouble. It means that the *n* of the Middle English *napron* has dropped because the phrase *a napron* has been misunderstood as *an apron*. (Similar loss of an initial *n* may be found in the English words *adder* and *umpire*.) The reference "See MAP" is for the sake of furnishing the additional information, found in the etymology of *map*, that the Latin word *mappa* is of Punic origin. The direction to compare NAPERY calls the reader's attention to a related word, interesting because it has not lost the initial *n*.

purvey [ME. *purveien*, *porveien*, OF. *porveeir* (pres. 3d pl. *porveient*), *porveoir*, F. *pourvoir*, fr. L. *providere*. See PROVIDE; cf. PURVIEW.]

The query here is why the third person plural, present tense, is given, when it is not given usually. Here it is of value because it shows the same vowels as the final syllable of the Middle English word shows, and may well be the Old French form from which the Middle English word is derived. The "See PROVIDE" directs the reader to where will be found the meaning and derivation of Latin *providere*.

The foregoing discussion, while not exhaustive, takes up

some of the typical difficulties of the interpretation of etymology. The illustrative examples (from Webster's New International Dictionary) are harder than will be found in any of the abridged dictionaries for the use of the individual pupil. The teacher should be able, if the preceding discussion has been well understood, to explain any of


A
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choose (chōōz); *v. t.*; *pret.* CHOSE (chōz); *p. p.* CHO'SEN (chō'z'n), CHOSE (*Obs.*); *p. pr. & vb. n.* CHOOS'ING. [ME. *chesen, cheosen*, AS. *cēosan*; akin to OS. *kiosan*, D. *kiezen*, G. *kiesen*, Icel. *kjōsa*, Goth. *kiusan*, L. *gustare* to taste, Gr. γεύεσθαι, Skr. *jush* to enjoy. Cf. CHOICE, GUST taste.] 1. To make choice of; to select; to take by way of preference from two or more objects offered; to elect; to decide (to do something) from inclination or preference; — often with infinitive object; as, to *choose* the less of two evils; he *chooses* to go to London.
Chose me for a humble friend. *Pope.*
2. To think proper; to please; — with infinitive object.
3. To wish to have; desire; want. *Vulgar or Colloq.*
The landlady now returned to know if we did not *choose* a more genteel apartment. *Goldsmith.*
Syn. — Elect, prefer, single out. — CHOOSE, SELECT, PICK, CULL. CHOOSE is the generic term; it is to take or fix upon something by an act of the will, esp. in accordance with a decision of the judgment; as, "that he may know to refuse the evil, and *choose* the good" (*Is.* vii. 15). SELECT (see SELECT) suggests more definitely a preference based on a discrimination among a number of objects; as, "one particular nation to *select* from all the rest" (*Milton*). PICK implies a careful selection, CULL, a nice or fastidious gleaning; as, "Geraint, dismounting, *pick'd* the lance that pleased him best" (*Tennyson*); "[Gray] had exquisite felicity of choice; his dictionary had no vulgar word in it, no harsh one, but all *culled* from the luckiest moods of poets" (*Lowell*). See ALTERNATIVE, GATHER.
not to choose (to do a thing), not to be willing, and hence to forbear; as, he did *not choose* to go to the ball. — **to c. sides**, to select those who shall compete, as in a game, on either side.

the abridged etymologies of a small dictionary, and almost any of the full etymologies of a large dictionary. Here again the suggestion may be made that in teaching a class to interpret etymologies, the teacher should solve only such difficulties as actually arise. Let the class go on thinking as long as it can, that etymology is just as straight reading as any other print. In small dictionaries it is, almost.

7. What a Large Dictionary Tells about a Word. A. — It gives the pronunciation. (A list of familiar words at the bottom of each page shows the meaning of the diacritical markings.)

B. — It tells the part of speech to which a word belongs and, in the case of a verb, whether it is transitive or in-

transitive. (A table of the abbreviations used will be found just before the main vocabulary.)

C.— It gives the preterit, past participle, present participle, and verbal noun forms of a verb.

D.— It indicates by the abbreviation *Obs.* (obsolete) whenever a form or a definition has gone out of use.

E.— It tells the origin of a word, and its history before it came into English.

F.— It refers to related words, many of which are so unlike in form that the relationship would not be guessed.

G.— It defines a word, giving the definitions in their historical order, oldest first.

H.— It gives citations from standard authors illustrating the use of a word.

I.— Whenever a sense of the word is not in good literary use its exact degree of respectability is indicated.

J.— It gives a list of other words of similar meaning.

K.— It distinguishes, by explanation and literary citations, between these words of similar meaning.

L.— It explains idiomatic phrases in which the word is used.

8. Conclusion. When the teacher has by the various means outlined brought the pupil to the desired state of proficiency in the use of the dictionary, there remains only the task of seeing that this acquired proficiency is put to daily use. With the large increase in the past few years in the quantity, and the vast improvement in the quality, of literature read in schools, this should be an easy matter. A modern school course in literature bristles with words unfamiliar to the pupil. It is better in every way to have these words looked up in a dictionary than to rely on an annotated text. The spoon-feeding methods of the texts "especially prepared for school use" rob the pupil of all initiative. Moreover the information that comes with little effort does not stick as does the information that is dug out.

In addition to the use of the dictionary in connection with literature, the teacher can stimulate interest by judi-

cious selection of interesting words for the pupil to investigate in a large dictionary. The stimulus will be the more effective if the words are not thrown at the pupil's head, but come up, or can be made to come up, in general reading. Examples of the sort intended are, for etymology, *nasturtium*, *candidate*, *treacle*, *pedagogue*; for sense development in English, *naughty*, *hearse*, *gossip*. The teacher's responsibility ceases when the pupil turns instinctively to the dictionary for light upon new words. The "dictionary habit," once acquired, is an everlasting possession.

CHAPTER THREE

COMMUNITY INTERESTS

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EDITORIAL NOTE: The rapidly growing interest in a more widely extended use of the schoolhouse is a most hopeful sign in community life. For the purpose of emphasizing this important movement, the publishers of *Public School Methods* engaged Prof. Edward J. Ward of the United States Bureau of Education, Washington, D. C., to prepare the chapter on *The Community Center*. There is no better authority on this subject than Prof. Ward. "Edward J. Ward discovered the schoolhouse," said Frederick C. Howe in the *Saturday Evening Post*. In 1907 Prof. Ward became supervisor of the wide use of the public school property of Rochester, N. Y. His work there attracted wide attention. In 1910 he became a member of the Extension Division faculty of the University of Wisconsin, where he continued his work on a state-wide plan, until 1916, when he was called to the United States Bureau of Education, and given an opportunity to extend his work throughout the country.

1. The Community Home. "Without the men and women of the community organized to meet in the Schoolhouse, we felt that this institution represented a sort of orphanage, an abnormal and unnatural disconnection between the association of the adults and the association of the young people of this neighborhood. With the men and women assembling here in authoritative common council, understanding and coöperation would develop among them, the necessary pattern and example would be given to the

older youth for whom this Building is properly the training place in self-government, and the continuity of the educational process, which is merely begun with the instruction of the children, would be realized. And we saw that this would mean the natural fulfilment and completion of this otherwise unfinished Community Home.

In that statement is set forth the perception of Miss Frances S. Fairley, the Principal, and Miss Cecil B. Norton, a teacher in the Grover Cleveland School of Washington, D. C., which led to the organization of the Grover Cleveland Community Forum, which, in turn, occasioned the drafting and introduction in the United States Congress of "The Hollis-Johnson Community Forum Bill," the measure that is recommended to each local community, to each State, and to the Nation as a whole, as furnishing the simple, consistent, practical plan for effective Community Center development.

In this conception of the public school as the unfinished community home is suggested the profound historic significance and prophetic potentiality of this characteristic institution of America, in which we have taken the children and set them in the midst. Such mutuality and power of coöperation as human beings have attained, otherwise than under the compression of fear, has been developed through adult association within the little sphere of the unit home, which was created by the uniting and liberating presence of the child at its heart. In the Public Place-of-the-Children is established this living nucleus for the fear-free organization of society. It is the sure foundation of the essentially sacred institution in whose fulfilment as the all-integrating and articulating medium of our common life, shall be realized — within the larger sphere of political and industrial relationships — the intrinsic democracy, the practical coöperation, which as yet we have learned only within the little circle of the primitive family group. As the sincere expression of the Soul of Humanity coming to find and free itself in America — the public school — developed

naturally into the community home — is inevitably to be the channel where through

> The blood that left the Common Heart
> Shall leap with common pulse again.

This conception not only describes the goal, but tells the spirit that should inform and pervade all the steps to the fulfilment of the Community Center. Its atmosphere should be that of the ideal and normal home, confident, comfortable, interesting, hospitable. The Community Center developed through the completed use of Number Fourteen Public School in Rochester, N. Y., was the one in which former Justice Charles E. Hughes said: "I am more interested in what you are doing and what it stands for than in anything else in the world; you are buttressing the foundations of democracy." It was this same center in which, on a Community Sunday Afternoon, an Italian-born American said those words which, more than any others, conveyed to President Wilson the deep spiritual significance and great promise of the community center movement, "Here, for the first time I find realized what I dreamed America would be when I was in Italy." But no appreciation of the success approximated in that particular community center went closer to the heart of it than the observation of a traveling man who, as a resident of its district, was a member there: "Won't it be *home-like* when other places take up this idea? One will always know that there is a friendly, interesting place where he can spend an evening, where class lines, religious and political differences don't count, where people are just 'folks.'"

But the conception of the fully used public school as the community home is more than evidence of sociological insight, and a description of the atmosphere that should pervade and comprehend this institution. This conception suggests and emphasizes certain cardinal principles of internal organization and external relationship which must be observed if the community center fulfilment of any public school is to be consistent, harmonious, vital.

2. Not a Hotel. The first essential characteristic of a home which must be reproduced in the community center use of the public school, if this development is to be consistent — indeed, if it is to be a *community* and not a *disunity* development — is that it is a membership of individuals, not an aggregation of groups.

Writes a public school principal:

> Yes, we have a "wider use of the school plant," but if unity is an essential quality of "community," then we can hardly say that this is a "Community Center." In the first place, the school building is used for voting. This means that, at election times and for the registrations, I am shoved aside, and a half dozen men, who are entirely out of harmony with the spirit of the school, come in to take charge of its use. Then the building is loaned out for political meetings, first of one party, then of another. I have nothing to do with them nor they with the school except to use its building as they would a rented hall. And finally the various churches have permits for their Sunday school basket-ball teams to use our gymnasium, and for their boys' and girls' clubs to use other parts of the building. There is no more unity of organization among the people who use the various free times and spaces of this school plant than there is among the people who happen to occupy the separated rooms of a hotel.

The characterization is apt. The increased use of the public school equipment, in the recent years of its conscious promotion, has, in many parts of the country, had the character of a *hotel* development in contrast to that of a *home*.

It was inevitable, and being inevitable was justified — as a way of beginning. It was, in miniature, precisely like the beginning of the use of this continent. At first the various colonizing groups came here, each under the auspices of an outside established organization. But, inevitably from the beginning the course of progress was toward the single liberating and empowering integration of the people gathered here. If that unification had not been begun, if the practical means of this integration had not been thought out and established, the life on this continent would have had no significance or promise for the world.

In 1911, the National Education Association, in its first

official endorsement of the community center movement, used these words:

> The school buildings of our land and the grounds surrounding them should be the radiating centers of social and cultural activity in the neighborhood, in a spirit of civic unity and coöperation. To safeguard, however, the integrity of our schools — which are in reality the homes of our children during a large part of their waking hours — so that the subtle elements residing in the atmosphere of a well regulated school may be preserved, this wider use of the school plant should be controlled exclusively by the school authorities.

Of course the phrase "controlled exclusively by the school authorities" raises a vital question which demands careful consideration; but the object declared for — to assure consistent unity and integrity of development as the public schools become, not merely "the homes of our children" (This use of the word "homes" as designating the abiding places merely of children is similar to its frequent rather pathetic use to designate orphanages.) but true all-including community homes — is so obviously elemental and vital that it seems strange that it should not have been seen all along.

The essential reason why, during this pioneering period, the development which has come about in the "wider use of the school plant" has largely had the disorganized and transient-housing character of a *hotel* rather than the rooted and continuing integrity of a *home*, is quite analogous to the reason why, in the beginning of the white man's use of this continent, there was the disunity of an aggregation of colonial groups. The reason is suggested in the phrase which has been characteristic of this period of unorganized beginnings — "wider use of the school plant." That was all that was seen — the school *plant*. It was simply the perception of the physical building. It was seen merely as a usable *place* unoccupied during evenings and Sundays and much of the time — just an unoccupied *place*. Let it be occupied! It was like the first view of America. To the peoples of Europe, it was just an unoccupied *plant*.

Of course, the failure of the Europeans back there to

picture what America was to be, was not strange, for there was nothing here to give the clue. It does seem strange that the view of the public school in its great meanings of fulfilment should have so commonly stopped at the perception that here is merely a physical *plant*, when, in the essential nature of the established use of this plant, the outlines of the completed institution are so obviously indicated.

But — strange or not — the various and conclusive demonstrations that the public school equipment may be used as the polling place, as the forum of political discussion, as lecture and music hall, motion picture theater, young people's club house, recreation center, branch public library, health office, employment bureau, art gallery, and headquarters of unnumbered sorts of coöperative enterprise, have come about largely through the policy of permitting the public school buildings to be used under other than public educational auspices.

Today, in the natural course of events — as natural as that which proceeded from the disunited colony — occupation of this continent to the conscious beginning here of national organization — the movement for the fulfilment of the Public School has advanced from the effort merely to get the buildings open for an undefined "wider" use — any sort of way — to the point where the problem is seen to be, not "whether," but "how."

This evolution is seen in a comparison of the spirit of the First National Conference on Community Center Development, held at Madison, Wisconsin, in 1911, with the National Conference on Community Centers, gathered in New York in 1916. The spirit of that five-years-ago meeting was the thrill and enthusiasm of a great *discovery*. There was clear vision of the immense meaning of this movement in President Wilson's opening address and throughout the conference, but for the most part, that meeting was simply the expression of a great many people of the Nation's amazing discovery of the schoolhouse, the

spirit which called forth such an expression as that of Edwin Markham, with which the conference was opened:

> We men of earth have here the stuff
> Of Paradise. . . .

The message of that conference was simply, "Here, ready to our hands, is the most marvelous social equipment that has ever appeared upon this earth. In the name of common sense, let us use it!" The gathering at New York in 1916 seemed less inspiring. It was actually more inspiring, for it marked the nation-wide advance of this movement in a half-decade to the point of focused consideration, not of the question *whether* the public school equipment should be made available for the use of all the people — everybody everywhere having come to practical agreement as to that general proposition — but *how* this community development shall be organized. No poem, no great address, here — but the careful thinking-out and formulation of the essential principles of proper Community Center organization.

Public buildings should be available for the use of the people as a right instead of a permission.

Tax money should be used in the promotion, development, and maintenance of community centers.

Community centers should be administered through responsible public officials.

Back of this threefold declaration has gone an accumulation of varied and convincing experience of the friction, confusion, and sporadic uncertainty of having public school buildings given over on permission for use under partisan, sectarian and other private auspices — of the indignity and insidious danger of private support or endowment of activities in the public schools — and of the jealousies and antagonisms that result from the policy of having offices of inherently public service occupied by irresponsible private individuals.

The colonial period, the pioneer time of mere unorganized occupancy of the public school plant under outside auspices — the time when there was nothing better than to

have this building opened for use after the fashion of a hotel — is past. The time for integrating the constitution of the community as one of membership of individuals is here. The present program is not merely to get the community house opened, but definitely to complete therein the construction of the community home.

3. The Community Executive-Secretary. The key to the problem of consistent community center development is in the *completion* of the official responsibility of the public school principal.

To revert to the great example of community organization through which this nation was formed: When the people on this continent came to the point of desiring to form one unified association, the essential thing that they had to do was to establish one central unifying office. If they were to place that office over them in authority, this would be a kingdom. If they were to place it under them as that of an executive, this would be a democracy. In either case that community organization would have been absolutely impossible without the uniting official. Precisely the same necessity holds for community organization within the smaller sphere of the primary public school district. The establishment of a central office into and through which all lines of administration are focused is the absolute requisite without which community center organization is impossible. The question then is, What is the status of this community official?— for upon his status depends the essential character of the organization.

As the administrator of the instruction of the children of the community, the public school principal is now the executive agent under the association of adults of the community. He is now the prime minister, the first servant of the community association of the mature in the administration of their prime duty and responsibility, which is their duty and responsibility for the welfare and training of the immature. Thus, for the public school principal consciously and actively to serve as the executive

agent through whom the community association of adults finds and expresses itself is simply to fulfil the implication of his present office as the servant in the neighborhood house. By his present responsibility for the instruction of the children, his status is fixed. He is definitely *under* the authority of the association of adults, as he is in authority *over* the children. To be sure, the public school principal is more than a local community official; he is also a town, or city, a county, and a state official, and with the federalizing of education, he is to be a national official, but, by as much as he is the administrative agent of the parental responsibility of the association of adults in the local community, he is necessarily *under* them as he is *over* their children.

The title *Secretary* has come to be adopted as descriptive of the community executive's official position, not only because it properly suggests his subordinate position in relation to the authoritative organization of the adult citizenship of the community and the analogy to the office of "secretary" of a Y. M. C. A. or similar institution, but because of the appropriateness of the term in its original meaning as describing this community official's function. *Secretary* means *keeper of secrets*. It is a simple fact about people everywhere that, concerning them, there are two sets of secrets. On the one hand, there are the secrets of depravity, pettiness, cruelty, greed — the Mr. Hyde potentialities of every individual, in which he is worse than he pretends to be. On the other hand, there are the secrets of aspiration, greatness of soul, kindliness, unselfishness, the Dr. Jekyll side, in which each of us is better than he seems. Each of us presents this better side toward the children. The public school principal, as the agent of our interest in the welfare of the children, is the keeper of these nobler secrets of every community, the secrets that represent the forces that shall be set free in the development of the community home.

The propriety and need of legislative provision for

properly recognizing and, with definite remuneration, fixing responsibility for executive-secretarial service in order to assure general and consistent community center development was stated by Charles P. Cary, State Superintendent of Education of Wisconsin, in his call to the Conference on Community Secretaryship as Public Service in 1914:

> The movement for developing the civic, social, and recreational — that is, the larger educational — resources in each community through the use of the public school building by adults for civic expression, by older youth for training in self-government, and by the whole community for wholesome recreation, has grown in the past few years out of the tentative and experimental stage. We know from the experience of many places in Wisconsin and elsewhere that systematic community center development is possible only where there is the definite placing of responsibility for executive-secretarial service in each community.

In the Community Center Pageant with which the first community to do so (Sauk City, Wisconsin) celebrated the inauguration of the public school principal as community executive-secretary, occurred this colloquy:

(Following speeches in which business men, farmers from about, women, youngsters and officials voice their several lamentations over the lack of community spirit and ask, "Who is to blame?"— Enter "Nobody," a shrouded, gray and gloomy figure.)

Nobody I am to blame. I am nobody!
The town, you say, is dead,— and, Who's to blame?
No Welcome is there here,— and, Who's to blame?
Your lives, you say, are bleak,— and, Who's to blame?
Your youth goes city-ward,— and, Who's to blame?
Your leaders lack support,— and, Who's to blame?
The things that should be done are left undone!
It's everybody's business — So, it's mine;
I am Nobody.

All shout: Nobody is to blame. Away with Nobody.

Mayor: But citizens and neighbors all; we cannot be rid of this knave Nobody, unless we find Somebody to take his place. Who shall this be? Where and how shall we find the one on whom this service of us all shall fall, whose proper duty it shall be to vitalize the common interest, to serve our understanding and coöperation as one community?

(Enter throng of children from the public school, and with them — the principal.— At his coming, Nobody shrinks away.)

Business Man: Strange we haven't thought of this before. This servant of the community to whom we have entrusted the greatest enterprise of all, the training of the children, is the man to serve the interests of our business prosperity.

Farmer: He's the Neighborhood's reception committee to the future. He's the one to make a welcome here.

Woman: He is now responsible for our greatest common interest. He stands for the one thing that can get us together.

Boy: Say fellers, this means, sumpun doin' round here! I ain't goin' to the city.

Mayor: Why, this is just plain common sense. We should have done it long ago. The natural place for the citizens to meet in is the building that all the citizens own together, and the natural person to act as executive-secretary of our meetings and good times there is the man who serves us in our children's gathering there.

It is often necessary to reorganize the work of this office so as to give time for the added duties, and it is frequently necessary that assistance be employed, but the first step in consistent community center development lies in the recognition of the truth of Miss Margaret Wilson's declaration:

The public school principal is the person to serve as community secretary. I foresee the time when this office will be recognized as the greatest in any community.

4. Make Schoolhouse Voting Center with Principal as Voting Clerk. In the Community Center Pageant above referred to — immediately after accepting as a part of his proper duty the official responsibility for service as the community's executive-secretary, the principal says:

But, Neighbors, here is a difficulty. My service is not owed to any one or few. My service is to the membership of the community as a whole. How is this membership now realized? Where is it expressed? The uniting instrument of this established membership is the ballot box. There focuses the responsibility by which the active, authoritative membership of this community is joined as one body. How shall you use me as your common servant? How shall you use the public schoolhouse as the true head-and heart-quarters of the community when the common instrument of your responsible membership-expression is not there?

The spokesman of the citizenship responds:

In the public schoolhouse the ballot box belongs. By it we are

united in one sovereign body. Through its use our intelligence is registered. Through it our membership with other community-memberships in the great fellowship of the town, of the county, of the State, and of the Nation is expressed. For the sake of the example to our youth who gather there, and for its own dignity as the uniting instrument of our sovereignty, we will carry this Ark of the Covenant of democracy into the public schoolhouse — the center, the capitol, the home of our community.

What this Wisconsin community did with appropriate celebration — transfer the voting instrument from its former insignificant location to its worthy and appropriate place in the public schoolhouse — has been done as a matter of economy, convenience and common sense, but without fitting observance of its meaning, in Boston, New York, Chicago, Salt Lake, Los Angeles, and a thousand lesser towns, villages and rural communities between.

But — and here is the important fact to note, and the fact which challenges every community in which there is a genuine will for its consistent self-organization — when the schoolhouse has been made the voting center, there has not been the corresponding official adjustment by which the community executive, the public school principal, has been made the voting clerk. Thus, this concentering by which the public school building has been made the common headquarters of the community's adult civic expression as well as the young people's civic training, has lacked the essential adjustment which would make it the perfect first step in consistent community center organization.

At the First National Conference on Teacher Training, held in Chicago in September, 1915, the following pertinent resolution was unanimously endorsed:

> As a ready and practical means of saving public expense, and at the same time vitalizing the service of the public schools in civic education, we favor the use of all public school buildings for voting and for that orderly all-sided presentation and discussion of public questions, which is the prerequisite of intelligent voting.
>
> In order that this use of the public school plant as the civic headquarters of the community may be properly correlated with its use as the headquarters of the children's instruction, we recommend that —

when the public schoolhouse becomes the polling place and civic forum of the community—the school principal or other responsible employee of the school board associated with the principal be authorized to serve as the Secretary of the community and made responsible for the systematic organization of all the uses of the public school property.

There is, of course, no more reason for having several persons to render clerical service for the voting of citizens in any community today than there was for having several persons to render this service to the voters in the old New England town. Moreover, there is just one official responsible for serving as clerk in the voting of aldermen, state legislators, congressmen, and every body of representatives. Of course, there may be, as there are at present, volunteer or party watchers at the polls, but, obviously, it may be said with fairness that the person who is not worthy to occupy this office of voting clerk under the adult citizens is not fit to be entrusted with the training of their children.

As the first physical adjustment in community center development is to make the public schoolhouse the voting center of the community, so the first official adjustment is to make the public school principal the voting clerk of the community.

5. Community Forum Organization. The clearest, most concise formulation of the program of adult citizenship-organization for consistent community center development is given by President Wilson in these words:

> It is citizens going to school to one another in the common schoolhouses to understand and answer public questions as hitherto only representatives of the citizens have gone to school to one another in the buildings provided for them.

The establishment of the public school building as the polling place is the equipment for the "citizens going to the schoolhouse to answer public questions" which belongs with the organization of the community forum, the equipment for "citizens going to school to one another to understand" the questions that are to be answered.

In the last few years, there has been spreading the so-called *Open Forum* movement, promoted by men and women

who have wakened to the vital necessity of providing opportunities for freedom of speech. In view of the danger of confusing the community forum, contemplated in the consistent use of the public schoolhouse as the community center, with the open forum it is well to note the distinction between these two institutions.

The first and best example of the open forum is Cooper Institute in New York City, from which, several years ago, Mr. George Coleman of Boston borrowed the idea which led to the use of Ford Hall for public meetings at which the persons in the audience are given some opportunity to ask questions of the speakers.

These open forums usually occupy private, *i.e.*, unneutral buildings, churches frequently being used; their financial support is from private sources; their policy is controlled by private individuals or by boards of directors or trustees; they are the meeting places merely of audiences — unorganized and gathered from wide areas. In view of these facts, it is significant that Mr. Coleman, a leading representative of this movement, has stated as the essentials of the "ideal forum" the following characteristics which belong not to the privately constituted open forum but precisely to the schoolhouse community forum:

> It must have a neutral meeting-place.
> It must be financed by the people themselves.
> Its policy must be controlled by the people themselves.
> It must serve the community as a unit.

Plainly, the one institution in each community which is capable of fulfilling these requirements is the community forum organized in the public school. Here when properly constituted, there is freedom of discussion, but this is not merely discussion for its own sake. It is discussion which properly leads to action. The forum and the ballot box are conjoined. It is precisely the organization of the adult citizens of the local school district to use the schoolhouse as the Town Hall was used in the old New England community except that, whereas the Town Meeting was yearly,

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this assembly of the citizens may be weekly; whereas the Town Meeting served for the discussion of local topics only, this Community Forum serves for the discussion of local, state, national and international questions, and whereas the Town Meeting was an assembly only of men, the Community Forum is properly the meeting place of the whole association of adult citizens, women as well as men.

But the supremely important fact to be seen is that this organization of the adult citizens is not unrelated to, but is constituted as the governing and controlling part of, the one organization of the community which includes provision for the training of the youth and the instruction of the children,—the combining of the two native expressions of the American spirit, the Town Meeting and the Public School, into one institution which has the completed character of the Community Home.

In the Hollis-Johnson Community Forum measure, above referred to, this relationship between the adult forum organization and the provision for the use of the schoolhouse by the young people is shown. As a thoroughly consistent and standard procedure for the organization of the community forum as the preliminary to the complete establishment of the community center, the method herein set forth may well be followed:

SECTION 1. Upon written application so to do, signed by not less than twenty adult persons residing in the vicinity of any public school building, all of said persons being parents of children enrolled as pupils in said public school, the board of education shall define and fix the territorial limits within which adult persons must reside to entitle them to participate as members in the organization which may be formed, as hereinafter provided, to use said public school building as a community forum, and shall announce the date and hour of a meeting, which date and hour shall be not less than one week nor more than two weeks after the filing of the application, and shall make all necessary arrangements for the comfort and convenience and good order of the assembly of adult persons for said meeting, and shall direct the superintendent of schools or the principal of the school in which the meeting is to be held to call the meeting to order and to serve as clerk until it shall have been decided by a majority of those present and, by residence

in the territory described by the board of education qualified to vote, that the Public School building is not to be used as a Community Forum, or until the organization of adult persons to use the Public School building as a community forum shall have been properly constituted, as hereinafter provided.

It will be noted that this plan provides for a *parental initiative*. The occasion of this provision is in the fact that throughout the South there are separate school systems for the white and colored people; this provision automatically assures that the initiation of the adult use of the building shall be consistent, in this regard, with its established use for children's instruction. As a rule the territory to be served by the forum will of course be the public school district, but there are cases where it is desirable to have this matter left open.

The calling of this formal referendum meeting provides the opportunity for a full consideration of the project, and its rejection or approval, in genuinely democratic fashion. Of course, as the preliminary to this formal meeting of the whole body of the citizens, information should be disseminated concerning the meaning of the community forum and community center as thoroughly as possible. Above all, at this initial meeting, the Principal, or his or her deputy, whose is to be the executive responsibility for its realization, should be prepared to lay the whole plan before the citizens. If the people have become reasonably intelligent, through this preliminary dissemination of the idea, regarding its essential meaning, there is likely to be no difficulty in assuring enthusiastic endorsement and hearty approval of the plan.

Sec. 2. If the proposal to use the Public School building as the Community Forum is approved at the meeting provided for in Section one, the adult persons, by residence in the territory described by the board of education qualified so to do may proceed to organize and elect necessary officers and prescribe and adopt by-laws and regulations for the conduct of the meetings of said Community Forum. The by-laws and regulations as adopted shall show that the primary object of the organization is public education through the open presentation and orderly free discussion of public questions, and nothing contained in the

by-laws and regulations shall limit the attendance or membership of adult persons otherwise than as provided in Section one (*i. e.*, residents within the territory described are members by virtue of their residence). The by-laws and regulations shall authorize and provide for the Principal of the School, or a person nominated by the Principal, to serve as executive secretary of the organization.

Excepting for the three essentials, public educational purpose, all-inclusive community membership, and administrative unification with the established use of the school building through the appointment of the Principal, or a person nominated by the Principal and approved by the citizens of the community, to serve as Secretary, the constitution may have any form that the local organization desires. The details of meeting time, special assessments, and so on, must be decided by each community for itself. Simplicity and brevity are desirable. The Constitution here given is the one used by the Grover Cleveland Community Forum in Washington, with which Miss Margaret Wilson is officially connected and by which the Hollis-Johnson Community Forum measure was formulated:

PREAMBLE

Whereas we, the men and women of the neighborhood about the Grover Cleveland School, have a common and absolute responsibility for furnishing to the youth of this community a worthy and living example of proper civic devotion, and a common opportunity to refine and clarify the intellectual life of this community to the benefit and enrichment of its every member; and

Whereas to fulfill this obligation and realize this opportunity, it is necessary that there be established in our midst a public or community forum, which shall serve as the medium of our community membership, the place where we may go to school to one another in the understanding of the problems of our life together, and the instrument of our effective coöperation in the common interests; and

Whereas the public schoolhouse furnishes the ready and appropriate headquarters for this genuinely public educational expression:

Therefore we do organize and establish the Grover Cleveland Community Forum, to be used for the open presentation and all-sided discussion of public questions in the hearing and with the equal participation of the adult citizens of this community. And for our government of this forum we do adopt the following constitution and rules of order:

CONSTITUTION

ARTICLE 1.— *Name*

The name of this institution is the Grover Cleveland Community Forum.

ARTICLE 2.— *Object*

The object of this forum is to provide opportunity for the open and fair presentation and free discussion of public questions.

ARTICLE 3.— *Membership*

SECTION 1. The membership of this forum includes every adult (white) citizen residing in the public-school district of the Grover Cleveland School; that is, the territory from which children come to this building for instruction.

SEC. 2. Until proper and adequate provision is made for the necessary secretarial and janitor expenses to be paid out of public funds as other public educational expenses are paid out of public funds, there shall be a sustaining membership composed of all citizens who contribute 50 cents or more per year to be used in paying these necessary expenses of the forum.

SEC. 3. Until such time as there may be similar community forums established in other sections of the city, any adult resident of the District of Columbia may attend and participate in this forum assembly as though he were a resident of the Grover Cleveland neighborhood.

ARTICLE 4.— *Officers*

The officers shall be a president, a vice-president, a secretary, and a treasurer, and their duties shall be such as usually pertain to their respective offices. They shall be elected by majority ballot as soon after organization as possible, and thereafter annually at the first business meeting in October. They shall hold office until their successors have been duly elected. In case of the disqualification or resignation of any officer, the president shall have the power to make a temporary appointment, which shall continue in effect until the next business meeting of the forum association.

ARTICLE 5.— *Committees*

SECTION 1. There shall be an executive committee, consisting of the officers and the chairmen of the standing committees, which shall be charged with the special duty of promoting the interests of the forum. The secretary of the forum shall serve as the clerk of the executive committee.

SEC. 2. The president shall appoint a program committee, which shall coöperate with the secretary in securing speakers and arranging programs for the sessions of the forum, and an usher committee, which shall serve in the meetings of the forum.

ARTICLE 6.— *Dues*

SECTION 1. There shall be no dues for membership.

SEC. 2. The dues for sustaining members, to be paid until this properly public expense is assumed by the public educational support, shall be 50 cents a year.

SEC. 3. The dues are payable at any time to the treasurer, who shall keep an accurate report of all moneys and give to each sustaining member a receipt for the payment of his dues.

SEC. 4. Except by vote of the assembly at a public meeting no moneys shall be expended except in pay to the secretary and the janitor for their service at the rate of $4 to the secretary and $2 to the janitor for each session of the forum.

ARTICLE 7.— *Meetings*

SECTION 1. The regular meetings of the forum shall take place at 3 o'clock on Sunday afternoons, in the assembly hall of the Grover Cleveland School.

SEC. 2. The business meetings of the forum membership shall be held at the call of the president.

ARTICLE 8.— *Quorum*

A quorum for the transaction of business shall consist of not less than 20 members.

ARTICLE 9.— *Amendments*

This constitution may be amended by a two-thirds vote of all members present at any business meeting, provided that written notice of intention to submit such amendment shall have been given at a business meeting at least two weeks prior to the meeting at which the amendment is to be voted on.

RULES OF ORDER

The forum shall be called to order and the first principal speaker of the day introduced not later than 3 o'clock.

The formal address or addresses should be finished and the subject of the day thrown open for discussion not later than 4 o'clock.

The discussion should last not longer than three-quarters of an hour, and at its close the speaker or speakers should be given opportunity to sum up the discussion and answer questions.

The president of the forum shall see that the following specific rules are closely adhered to:

In speaking from the floor in the open discussion the parliamentary rules requiring addressing the chair, etc., shall be observed.

Speeches from the floor are limited to three minutes, and the time may be extended only by unanimous consent.

No speaker may have the floor a second time until all others who wish to speak have had opportunity to do so.

Speeches from the floor must deal specifically with the topic of the day as set forth in the formal address.

SEC. 3. That when an organization of adult persons shall have been formed and by-laws and regulations adopted as provided in the preceding sections, it shall be the duty of the board of education to make all necessary arrangements and provisions for the weekly, bi-weekly, or monthly meetings of such organization at such times as the organization may designate for its meetings. Amendments to the by-laws and regulations not in conflict with the provisions of Section two of this Act may be made from time to time as the organization may deem necessary. No public schoolroom shall be used under the provisions of this act during such hours as it is in use for the instruction of pupils, and the board of education may make such other regulations as it may deem necessary to protect the physical property from abuse.

It will be noted that the foregoing provisions have to do solely with the organization of adults, with the establishment of the community forum, in relation to which the board of education is not a directoral authority, its function of control being limited to protection of the physical property. The definite recognition of the right and responsibility of the adult association of the community, when properly organized, to determine its own program and policy is the primary essential of this plan. Now follows the provision for the completed community *center* of which the community *forum* is the logical preliminary:

SEC. 4. That whenever a public school building shall have been established as a community forum under the provisions of this act, and upon request to the board of education so to do by a majority of the adult persons present and qualified to vote at any regular meeting, the said board shall designate such building as a community center for the organized training and recreation of the young people of the community, including such activities as may be requested by the said adult organization and approved by the said board, and shall make all necessary and appropriate arrangements for the convenient and proper use of

the building for community center meetings and activities at such times as the said adult organization may request and the said board approve. The executive-secretary provided for in Section two of this act shall serve as director of community center meetings and activities, and shall be responsible to the board of education for rendering this service. The said executive-secretary shall be provided with two assistants, one male and one female, who shall under the said executive-secretary be charged with organizing and directing the community center meetings and activities provided for in this section.

The distinguishing between the forum and the center does not imply separation, but proper coördination between the use of the building which is not under the direction of the board of education, but is properly an expression of citizenship-sovereignty, and its use for all other kinds of activities, in relation to which the board of education properly has administrative responsibility. In relation to the forum, the executive-secretary is an administrative *agent*, his only duty to the board of education being to make necessary reports, his obligation being to obey the wishes and serve the assembly of the adult organization: in relation to the community center activities, aside from those of the adult forum, he is a *director*. It is essential to consistent community organization that this distinction be clearly understood. There follows the provision for the remuneration of the executive-secretary and his assistants. This *per diem* arrangement is of course not so satisfactory as a salary adjustment, but its quotation here serves to show that the necessity for fixing responsibility for this public service by definite compensation is now fully recognized.

Sec. 5. That the executive-secretary authorized by this act for each public school building established and used as a community forum or as a community forum and community center under the provisions of this act shall be entitled to compensation at the rate of $4 for secretarial service rendered at and in connection with each meeting of such community forum and at the same rate for directoral service rendered at and in connection with each meeting of such community center, and the two assistants herein authorized for each building used as a community center shall receive for their services compensation at the rate of $2 for each meeting of such community center: Provided, That not more than $4 shall be paid any executive-secretary, and not more than

$2 shall be paid any assistant for services rendered under the provisions of this act in any one day, and that compensation shall be paid only for services actually rendered at and in connection with meetings of community forums and community centers.

There follows the provision for the paying of the expenses and compensations authorized. Here the important thing to be noted is that this expenditure is seen to be truly and properly public-educational and is to be made out of the public school funds.

It shall be the duty of the board of education to provide out of appropriations of public funds authorized for the public schools, light, heat, janitor service, and such other expenses as may be necessary to enable the comfortable and convenient use of public school buildings as community forums and community centers under the provisions of this act.

6. To Make a Beginning. Experience has shown that to assure permanency of community center development, it is necessary that these adequate provisions for this development be made by legal enactment. Thus the great object of study and effort, at the start and until it is attained, is to secure the proper recognition and establishment of the community center itself as more than a volunteer and temporary institution. To this end, of course, the best of all means is demonstration. To pay the expenses of this demonstration, private funds may be used, but it is most important that, excepting the assessments or collections of the forum meetings, all moneys that may be given, be paid over to the board of education to be administered through its regular channels of public employment and dispersal rather than paid directly by private contributors, whether individuals or associations. In a number of cases, following this plan, money has been put into the treasury of the board of education by private individuals to be used in paying the salary of a man or woman employed as associate of the superintendent of schools to assist the local principals or their deputies in demonstration development.

In this preliminary demonstration, it is obviously desirable to adhere as closely as possible to the systematic

procedure outlined above. For instance, it is important that the beginning be made by a well-advertised community referendum. There are several instances of opposition to community center development which have been due entirely to the resentment caused by the fact that the adult citizens of the communities were not formally consulted and given opportunity to express their approval at the start. Whatever the situation, the first thing to be done is to secure the organization of the adult community forum.

7. The Forum Program. Dr. Samuel McChord Crothers of Cambridge was invited to address an assembly of neighbors in a schoolhouse community forum. He accepted the invitation, but failed to tell what his topic would be. When he came to speak he said: "It would seem as strange and unnatural to announce a topic for such a gathering as this, as it would be to fix and publish in advance what I and we are going to talk about when I come home to dinner." This is the ideal of the community forum — not stilted lectures and speeches cut and dried, but interchange of ideas with the natural freedom and courtesy of a household.

While the development, in which the forum program can be left to make itself, is far ahead of the community at the beginning of its organized expression, yet this ideal should be kept in mind. Parliamentary procedure should be adhered to, not for its own sake, but because this is the way to the freeing of speech in conference. A good way to prevent the discussions from getting into a rut is to devote successive meetings to local, state, national, and international questions — following the consideration of matters which belong to the neighborhood of the world by the discussion of those which belong to the world of the neighborhood, and so dealing in order with live problems that belong to these concentric spheres of interest and responsibility. "To understand and answer public *questions*"— that phrase tells how every topic should be presented. The forum is not the place simply to hear about things, but to solve problems. Every public question, whether of public

health, condition of the streets or roads, parks, industrial conditions, newspaper service — all the way to the problems of international relationship is a matter, first of understanding, "What we have," and then determining, "What we want." So, the normal arrangement is to have each topic presented from the conservative point of view, that is, the view of the defender of things as they are, and also from the radical view of those who see improvements to be made. It goes without saying that, in the hearing of candidates for office, fair and equal opportunity should be given to all.

8. The Organization of the Young People. Some time ago, when I began to recognize the need of a recreation place, especially for young people, I thought of building a parish house in connection with my church. I then thought it would be more economical to unite forces with others in the building of a Y. M. C. A. Today I see that the money that a Y. M. C. A. would cost, would go many times farther and would benefit all the young people instead of only a few, if it were to be contributed through the regular channels of public educational coöperation and spent in securing equipment and supervision for the use of the schoolhouses and grounds, during the time they are now idle, for club activities and physical training. This is just as educational as the study of books. It is the proper business of the community.

This perception of a prominent clergyman in a middle-western town, is sure to come to the adult citizens of any community just as soon as they begin finding the possibility of using the public schoolhouse as their own headquarters of association. Moreover, the adult forum organization furnishes, not only the initiative but also the natural model and pattern for the organization of the young people. In the adult use of the schoolhouse, there may be any sort and every sort of subsidiary organization, which is approved by the committee-of-the-whole forum, such as, a camera club, a dramatic club, a Shakespeare club, and so on. In the same way, not only for gymnasium activities, but for other specialisms, the young men and the young women, and smaller special groups, may be formed, but, as with the adults, it is desirable that, first of all, the one organization of all the older youth of the community should be established as the effective means of a real civic apprenticeship.

9. The General Evening. As in the normal household, the responsible adults have their times of special counseling, so in the forum assembly in the community center; as in the normal household, the youth have their own occasions of separate interest, so properly in the community center — but, as in the normal household, there is also in the community center the time and the place for the gathering of the whole group together for those expressions and enjoyments that know no difference of years. It is in this communal gathering of the whole neighborhood family, with music by the community orchestra at its opening, and then a lecture or a play or motion pictures, followed by an hour's wholesome intercourse, with dancing or other form of free enjoyment, that the creative festival spirit that sings is born.

There is not a holiday in the calendar for the celebration of which this general community center gathering does not afford the most appropriate medium. The "community Christmas" belongs here, for what Christmas is among the days of the year, the schoolhouse is among the buildings in any community. So, here where past and future blend, where all are guests and all are hosts, New Year's finds its due observance. Here the patriotic days may, of course, be most worthily celebrated. Here even Hallowe'en yields its better meaning, and the original idea of Thanksgiving as a *community* festival is restored.

Of such a general evening in a community center, a visitor said:

> In the room were gathered the fathers, the mothers, the grandfathers, the grandmothers, the young men and the young women, and, oh, it was good to see. We had half an hour of song and a half hour of talk, and then we had some dancing and I saw the finest thing I have seen in years; the fathers danced with their daughters, the mothers grown young again danced with their sons. Weren't they happy? Indeed, they were. I saw a vision of the future, a vision with a promise. No one could come there and not be thrilled to higher endeavor, finer, stronger, and better effort, truer service and more unselfish love. It was, in very truth, "the place where everybody felt at home."

10. Program Material. Of the community center songs, the best that has been written is *The Forum*, by Justice Wendell Phillips Stafford of Washington. The words go well with the air of *Fling Out the Banner*; *Let it Float*, which is generally familiar. The other songs are appended as suggestions of the kind of songs which any community can write for its own use.

THE FORUM

Make wide the doorway of the school
  Around whose sill the millions wait,—
The cradle of the common rule,
  The forum of a stronger state.

Make broad the bar, and bid appear
  The questions clamorous to be tried,
And let the final judges hear,
  Themselves, the causes they decide.

Write bold the text for age to read
  The lesson not discerned by youth;
And raise the altar of a creed
  Whose only article is truth.

Though fair and dear the ancient mold
  Wherein the burning thought was cast,
Pour not a New World's glowing gold
  Into the patterns of the past.

Whatever channels lead apart
  The currents of the lives of men,
The blood that left the Common Heart
  Shall leap with common pulse again.

IT'S A SHORT WAY TO THE SCHOOLHOUSE

Air: *Tipperary*

To a Schoolhouse Center came a lonely man one night,
Saw the building filled with folks, the windows gleaming bright.
Sounded songs of neighbor-greeting, joys that all might share.
It burst the bands that bound his heart to find a Welcome there.

Chorus:

It's a short way to the Schoolhouse. It's a short way to come.
It's a short way to the Schoolhouse. There's one right near my home.
Then, Good-bye! Gloomy Evenings! Farewell! Lonesome Care!
It's a short, short distance to the Center, and I'll meet you there.

2

Th' lonely man bethought him of a lonely girl he knew,
Sat him down and wrote a note: "I have good news for you;
Move into this Neighborhood, for here's a trysting place —
A common ground, where bars are down, and folks meet face to face."

Chorus:

3

Th' girl who had been lonely wrote him back a glad reply:
"'Deed, I'll stay right where I am, and — if you'd have me nigh,
Your pal for jolly evenings, then I'll tell you what to do —
Just steer your car right over here — for we've a Center too."

Chorus:

NEIGHBORHOOD

For a recitation

1

The starting point of every good —
Of larger life — is Neighborhood.
It's fear-free banners now unfurled
Mean hope of peace to all the world.
If we can meet and join as one,
Here, from all lands beneath the sun,—
Then neighbor-nations too, shall — in our time —
Forge world-wide union in a bond sublime.

2

Then, in this sacred Common Place,
Which we have builded that the race
May nobler be in mind and heart,
We join that we may have our part
In Neighbor-Union without bound,
That, spreading all the earth around —
Seeking naught less than Mankind's Common Good —
At last, shall make the world one Neighborhood.

THE FELLOWSHIP OF FOLKS

(Air: "*Drink to Me Only With Thine Eyes*," Or: "*Auld Lang Syne.*")

1

Come close and let us wake the joy
Our fathers used to know,
When to the little old schoolhouse
Together they would go.
And neighbor's heart to neighbor warmed
In thought for common good.
We'll strike that fine old chord again —
A song of Neighborhood!

2

Out in the world we all have learned
The strain of toil and care.
It's dimmed the visions of our youth,
Of joys that all might share.
In thought for self, we've all but lost
That youth-born faith in men.
Come 'neath this common roof, for here
It kindles bright again.

3

The fathers clove the wilderness
And made a clearing here,
Then, at its heart, this friendly roof
They joined their hands to rear;
And here they met and talked and planned
A larger common weal.
Their Future we are living now.
We, here, their purpose feel.

4

That little old schoolhouse is gone.
Its friendliness must stay.
The strength it gave our fathers' hearts
Our own hearts need today.
Great is the task that 'waits our hands;
The power of each is small.
Uniting in this Common Place
Comes forth the might of all.

To serve thy generation, this thy fate:
"Written in water," swiftly fades thy name;
But he who loves his kind does, first and late,
A work too great for fame.

— Mary Clemmer.

Is true Freedom but to break
Fetters for your own dear sake,
And, with leathern hearts, forget
That we owe mankind a debt?
No! true freedom is to share
All the chains our brothers wear,
And, with heart and hand, to be
Earnest to make others free!

— Lowell.

CHAPTER FOUR

THRIFT

1. Meaning of Thrift. "Laying aside a few dollars each week does not necessarily make one a thrifty person. Thrift means so much more than merely saving money — it means personal efficiency — it means plans — it means self-control — it means foresight — it means prudence — it means sane and legitimate self-confidence — it means all that makes for character. It is as much removed from miserliness on the one hand as it is from extravagance on the other. As we build the ideals of thrift we build character."— S. W. Straus, President of The American Society for Thrift.

2. Necessity for Thrift. The United States is blessed with natural resources so varied and so abundant that until within the last few years the American people seemed to think that these resources were inexhaustible, and they wasted almost as much as they used. Finally the National Government came to realize that unless the waste of forests, mineral lands and water power were curtailed, these resources would soon be reduced below their capacity to supply the needs of the people, and the Conservation Movement was started. Since 1908 much has been done to prevent waste of our forests and mineral resources, and to prevent corporations from obtaining control of the most valuable water power on government lands. In its efforts to conserve these resources the National Government has been aided by the state governments, and now the nation is committed to the conservation of these great sources of wealth.

As a people we are improvident. Government statistics show that 98 per cent of the American people are living from day to day on their wages. To these people loss of employment would mean pauperism. Less than 6,000,000 out of 20,500,000 families own their homes. Sixty-six people out of every hundred who die in the United States leave no estate, and at sixty-five years of age, ninety-seven out of every one-hundred are partially or wholly dependent upon relatives, friends or public charity for their support. The country is wealthy, but the people are poor. Why? Because they have not practised thrift. If the future generations are to be in a better condition it will be because the children of today are taught to be thrifty. This teaching must fall largely to the public schools. So important does this work seem to some of the far-sighted business men of the country that in 1915 they organized the American Society for Thrift. The National Education Association the same year appointed a committee to make a thorough study of the best methods of teaching the subject.

Only a thrifty people can make a thrifty nation. A thrifty family is one in which the majority of members, at least, are thrifty; therefore, thrift is an individual matter, and this chapter is devoted to the consideration of the subject from the view-point of the individual.

3. Saving Money. Many people think that one cannot save on a small income, so never try. Such people fully believe that some time in the future, when their income is larger, they will begin to save; but by that time *they have formed the habit of spending*, and it is even more difficult for them to save on a larger income than it would have been at first.

In the beginning it is not so much the amount saved as the formation of the habit of saving that counts; therefore, everyone should save something from his income, be it no more than a dime or a penny. The teacher who can induce her pupils to save something from their allowances or their earnings is helping them to form a habit of untold value. We suggest the following plans:

(a) Motive. No one does anything deliberately without a motive, therefore every child should have a motive for saving money. Saving always requires the setting aside of an immediate for a remote good. Mary has a weekly allowance. She has been accustomed to spend ten cents for going to a moving picture show and fifteen cents for candy. At the end of the week she has no money and often has to go without something she really needs because she has no funds with which to purchase it. Talks on thrift, which include these expenditures by most of the pupils, will soon set them to thinking about the wisdom of saving a few cents each week from their income. Ask a few questions: "How many can remember how the candy they ate yesterday tasted? Did you feel any better after eating it? Did you then derive any permanent good from it? How many can remember anything of value that they saw in the moving picture show last week? Now is it not better to save a part of your money so that when you need something of real value you can purchase it? Remember that the immediate satisfaction of a desire seldom has any lasting effect. We often sacrifice a greater pleasure or good in gratifying our immediate desires. If you save only five cents a week, that will amount to two dollars and sixty cents in a year, and if you can save ten cents a week you will have five dollars and twenty cents at the end of the year. Now how many think they would like to begin saving?"

A few appeals will secure a number of pupils, so before the appeal is made the teacher should have her plans all laid. If in a graded school she will probably have no difficulty in arranging through the principal to start a savings-bank account for her room. Of course, before any plan of this sort is mentioned to the pupils, the consent of the board of education should be obtained.

In rural districts the problem is somewhat different. Few children living on a farm have stated allowances of spending money. They are more likely to be given a lamb, a pig or a calf, or to be promised a share of the income from some crop or from the poultry yard, provided they perform a certain

amount of work or meet other requirements. This plan works well where the parents keep faith with the children, but it is to be regretted that in too many instances this is not done. The old maxim, "The boy's calf but the father's ox," has not yet lost its force, and many a boy has left the farm to seek what he thought would be more remunerative employment in the city, because his father did not keep faith with him. Corn, pig and canning clubs are now helping the boys and girls on the farms to earn money. Since most farmers are frugal it is easier for children on the farm to save money than it is for those in the city. In giving talks on saving money the teacher of a rural school should take these conditions under consideration.

(b) Unwise Purchases. Few people are good buyers. In cities, many women are "bargain chasers." They often buy what they do not need because they believe that they are getting it "cheap," when, in most instances, they are paying a high price for an inferior article. Had these women been taught the principles of thrift when they were school girls most of them would stay away from the "bargain counters." An inferior article at a low price is often more expensive than a similar article of good quality at a somewhat higher price. Cheap clothing, cheap shoes, cheap jewelry and many other cheap articles are found in the homes of those who do not know how to buy.

Far removed from the "bargain chasers" are the extravagant buyers who pay more than is necessary for what they buy. Some of these are people of means and can pay the price without suffering any inconvenience; nevertheless, when anyone pays more for an article than it is worth, he is using money carelessly, for the excess could be put to a better use. But the worst effect of such purchases is in the influence they exert upon a large number of people whom they cause to live beyond their means. Mr. A has an income of $5,000 a year. He has two children who have received their education and are ready to enter business. He has never incurred any debts, and has several thousand dollars invested in good securities.

He buys an automobile for $1,500. Mr. B, a near neighbor, has an income of $2,000 a year. He has four children to educate and lives in a rented house. Because A bought an automobile, B must have one, so he buys one on the installment plan, paying a few dollars down and agreeing to pay a specified sum each month. B's family could not afford the automobile, and its purchase entailed upon the household a burden of debt that prevented them from buying many necessary things for more than two years. B represents a large class in both city and country. Many buy clothing they do not need, furniture they cannot afford, and luxuries that are unnecessary because they want to "keep up appearances." They constitute a large proportion of the 98 per cent who live from day to day on their wages and have nothing laid by for the future.

The teacher should impress upon her pupils the value of the following principles:

1. Never buy anything you do not need.
2. Never buy an article because it is "cheap."
3. The wisest purchases are those of serviceable articles at a fair price.
4. Tradesmen do not sell goods at a loss unless forced to do so under extraordinary circumstances. So-called "sales" at which merchandise is offered at "greatly reduced prices" are for the benefit of the tradesman, and not the purchasers. On general principles it is wise to keep away from such sales.
5. Persons of real worth do not "put on style" and live beyond their means to keep abreast of their neighbors.

4. Waste. The old adage, "A penny saved is as good as a penny earned," is still true. Not what we earn but what we save determines, in the long run, whether we are to be independent or poverty stricken. America is the most wasteful nation in the world, and this is because the citizens are wasteful. Nearly enough food is wasted every day to feed one-half the people of the country. Why? Chiefly because housewives and cooks do not know how to use portions of vegetables and meat, and because it is easier to throw them away than to learn how. Another reason is that more food is prepared

than is necessary, and at least a portion of the surplus is wasted.

But little over one-half of the tillable land in the country is under cultivation, the balance being allowed to run to waste. Millions of feet of lumber are destroyed every year by forest fires, which proper care might prevent. Statistics tell us that the discarded cooking utensils, broken stoves and old tin cans and other material gathered off the dumps in large American cities in one year produced material worth $14,000,000.

These are some of the illustrations of waste on a large scale. How about waste caused by individuals? After one or two talks about the waste of material on a large scale, give one or two talks of a more local nature. Ask the pupils to look for waste in the home, in the community, in themselves. This will call attention to a grave fault common to almost every one. Attention being called to our wastefulness, ask the children to try to find the causes for it. As each cause is mentioned it should be discussed to determine whether or not the one mentioning it is right. Doubtless there will be two sides to most of these discussions, and wrong causes will be given, but out of these discussions will come ideas and resolutions of great value, if the discussions are entirely impersonal.

Now bring the matter home to the pupils. How many waste the school supplies furnished for their use? Do you use a piece of paper twice as large as you need to write a given exercise on? If so, you have wasted half the paper. Who is at fault, the pupil or the teacher? (This depends upon whether or not the teacher has seen that the paper is cut the right size for the exercise.) If pupils are left to their own devices, many of them will waste the paper. How many throw away their pencils before they are used up because they do not like to write with a short pencil? How many waste pens, ink, blotters and other supplies?

If pupils waste material belonging to the school they are likely to waste that belonging to themselves or their parents. How many have a work dress or a work suit to wear at home so as to save the dress or suit worn to school? How many girls

ask for a new dress when they have several only slightly worn, some of which could readily be made over? How many boys buy new shoes when half-soling the old pair again would make them good for another three or six months? How many have more hats, caps and other articles of clothing than they need? How many have plots of ground about their homes not in use, on which vegetables or flowers might be raised?

These and other similar questions will arouse the pupils to a consideration of this great problem of waste, but the consideration will not be confined to the school. The pupils will talk about them at home and the entire community will become interested. When this stage is reached it is a good time to organize the school into a thrift club, which the parents should be invited to join. The chief purposes of this club should be:

(1) Saving money.

(2) Prevention of waste by the more careful consumption of material — food, clothing, fuel, etc.

(3) The study of economic conditions for the purpose of saving time and labor in the various occupations of the school and neighborhood.

Such an organization will not revolutionize the habits of a community in one term or one year, but it will unite the home and school in a more complete coöperation, and it will secure marked improvement in the economic affairs of the pupils and many of their parents.

Each pupil should be encouraged to keep an account of his savings, not only in money but in other matters, reckoning each saving at a fair cash value. The total amount of these savings at the end of a month will astonish both teacher and pupils. Tom Jones was going to buy a pair of shoes that would cost five dollars. He had his old ones half-soled for one dollar, and they would last three months. He saved at least half the price of the shoes, or two dollars and a half. Sarah Martin was about to get a new dress that would cost ten dollars. She had an old one made over, paying three dollars to the dressmaker and one dollar for trimmings, saving six dollars. These reports can be given to the teacher privately and the names

withheld in making the report, if the pupils so desire, but the grand total should be given each month.

5. Saving Time. "Time is money." Yes, but it is more than money. It is the agency by which one can bring himself to any degree of perfection of which his talents are capable, or by which he can take himself to the lowest depths of degradation. Do your pupils spend twice as much time as is necessary in learning an arithmetic lesson? If so, half that time is wasted and the pupils are acquiring listless habits. You need to revise your program. How do your pupils spend their time out of school? How much is given to play? to helping at home? to reading and study? Make a canvass of your school to learn these facts, then give your pupils interesting talks on the value of time. You have already told them how a dime saved every day would in time lead them on to independence; so the minutes wisely used will enable them to become useful and honorable men and women. Cite such examples as Lincoln before the log fire, Watt studying the teakettle, Franklin in the printing office, Thomas A. Edison working days and nights together without sleep. These men attained to eminence because they made a wise use of their time.

Almost every community has its loafers. They gather at the village store or in some other center and spend much of their time in gossip. Boys who frequent such places seldom make successful men. Not only are these people wasting time that might be spent profitably, but they are contracting habits of idleness and filling their minds with vicious thoughts. Some organization should be formed among the boys that will keep them from gathering with loafers. Boy scouts, companies for military drill, clubs for carrying on, out of school, lines of work in which the members are especially interested, are all excellent for directing boys to something of lasting benefit.

While girls do not have as many temptations as boys, many of them waste hours every week in idle gossip or frivolous pastimes, and clubs for girls are equally necessary. Probably the best of all these organizations is the Camp Fire Girls. Cooking, canning and sewing clubs are also excellent.

Caution. We would not have the reader infer from what we have said in the foregoing paragraphs that we are opposed to play. Every child should spend a portion of each day in play. But here much time is wasted because the children do not know how to play. Watch the pupils of any school on the playground during recess and notice how many spend the time loitering or in playing in a half-hearted manner. The teacher should be able so to direct the play of her pupils that all will join heartily in some game during the play periods.

6. Improving One's Opportunities. The greatest opportunity that comes to every boy and girl is that of obtaining an education, yet many boys and girls fail to grasp the importance of this opportunity and leave it for another of far less value. That is, they leave school to go to work or for some other fancied gain, only to learn when it is too late that they made a very unwise choice. The question of leaving school is fully discussed in the chapter, *Vocational Guidance*, and we make only such reference to it here as is necessary to show that time spent in training the mind is of the greatest value. A person without at least a common school education is at a great disadvantage in any vocation because he has to compete with those who are educated. Sometimes it becomes necessary for a pupil to leave school before completing the work of the eighth grade. Such a boy or girl will have a hard struggle, but the case is not hopeless, for there are evening schools, correspondence schools and other aids through which these young people can carry on their studies; but of course their progress is much slower. It is therefore economy for pupils to remain in school as long as it is necessary to fit them for their chosen vocation.

Again, in choosing a position the young man or young woman should look to the future as well as the present. It often happens that a position with a lower salary at the beginning, but with good opportunities for advancement, is better than one with a higher salary and little or no opportunity for advancement. The thrifty person always considers the greater good, though it may be more remote. Boys and girls

in their teens are not able to look very far into the future and they need good counsel when called upon to make choices that will have a far reaching effect.

7. Saving Health. A sickly child is always behind in his classes and irregular in his attendance at school. The man or woman in poor health seldom succeeds in business, because of competition with those who are in full vigor of body and mind. Thrift means saving health as well as saving money. In health-lessons in school, the economic value of health is too often overlooked. Under normal conditions the pupils should be in good health, but there are some who are frequently absent because of colds, headaches and other ills.

The teacher can do much to enable these pupils to overcome the disadvantage under which they labor, by private advice and suggestion. She can also aid all the pupils in maintaining a high standard of health by frequent talks upon such subjects as food, clothing, sleep and exposure. Many pupils, especially among the girls, become anaemic because of frequent eating of candy and other sweets between meals. This practice destroys their appetite for nourishing food and soon leads to a weakened condition of the system.

Again, lack of proper clothing is often a cause of ill health. Some pupils prefer fashionable to comfortable clothing. Low shoes, thin stockings and light underwear in winter are the cause of many a breakdown among girls. Boys can usually withstand the weather better than girls, but on the other hand, their style of dress gives them greater protection. Boys often play in the water, roll in the snow and in other ways contract colds. These matters should be fully discussed from the economic as well as the hygienic point of view. (See Chapter V, *Personal and Community Hygiene.*)

8. Thrift and Penuriousness. The thrifty man is one who saves his money, prevents waste in his business, lives economically, husbands his resources and uses his means so as to increase his wealth and at the same time benefit his fellowmen. He is not stingy, but careful; he will not help pauperize the unfortunate by lavish contribution for their support, but will

help them to become self-supporting. He contributes to the support of those public institutions which are for the welfare of the community — the church, public amusements and the public library, unless it is supported by a special tax. He keeps his wealth at work, either by using it in his own business or loaning it to others on good security and at a fair rate of interest.

The penurious man possesses few, if any, of the above characteristics. He hoards his wealth so that neither he nor anyone else derives any benefit from it. He takes little or no interest in public affairs except to oppose measures which call for the expenditure of money, however worthy they may be. He never contributes to the support of public institutions nor assists the unfortunate to become self-supporting. Such a man is not thrifty; he is miserly. His wealth does neither himself nor his fellowmen any good. Were the world filled with men of this type there would be no progress.

Teach true thrift, that thrift which will make the pupils good citizens when they become men and women, the thrift described in the opening paragraph of this chapter.

9. Institutions For Saving. The chief institutions for caring for the savings of the people are savings banks, postal savings banks and school savings banks. The total deposits in the savings banks of the United States exceed $4,700,000,000. This does not include the deposits in postal savings banks or school savings banks. In addition to these institutions many small banks have savings departments and pay interest on savings accounts.

All these agencies are for the purpose of caring for the savings of their patrons. They loan the money deposited with them on good security and pay the depositors a part of the interest received, usually three per cent. Every boy and girl should be encouraged to open an account in some savings bank. The establishing of school savings banks in cities has led to the saving of hundreds of thousands of dollars, most of which would have been spent unwisely. While most of the school savings banks are found in the larger cities, some banker in

almost any town will be glad to coöperate with the school authorities in encouraging the pupils to save money, and will arrange to receive their deposits. All that is needed is a principal or a teacher who will take the initiative.

10. Keeping Accounts. Many a business man has failed because he did not know whether he was making or losing money. "How much does it cost you to live a year? Reckoning your board at a fair price and adding to that what is expended upon you for clothing, books, pleasure and miscellaneous things, what do you cost your parents a year?" When this question is put to your pupils many of them will be astonished. They had never thought of such a thing! But it is well for them to think of it. The study of the problem thus set before them will make most of them more thoughtful about spending money. When their interest is secured, encourage each pupil to begin an account, placing on one side all the money received and the sources from which it was obtained, and on the other all the items paid out and the purpose for which each expenditure was made. It will require patience and perseverance to get some to keep their accounts from month to month; others will do it with but little oversight. The important thing is to lead the pupils *to form the habit of keeping a personal account.* When this habit is once formed the chances are that it will be continued through life. Such an account is of great assistance in apportioning our income and determining the amount that can be saved each week or month. It is a guide to economic living. Fixing this habit of keeping a personal account is one of the most important steps in teaching thrift.

11. Conclusion. Many of the lessons suggested may best be given incidentally, when the work in arithmetic, geography or some other branch naturally leads to the discussion of some of the points suggested. They should never be far-fetched nor be presented in such a manner as to lead the pupils to feel that they are being censured. On the contrary, they should be led to feel that these lessons are to help them to become successful men and women.

First, make out a definite budget of expenditures based on past experience, and thus force yourself to live within your income.

Second, save a little regularly. Make saving one of the items of your budget. Make the item large enough so the savings will amount to something, yet small enough that they can be kept up regularly.

Fourth, teach your children the value of a dollar and the value of saving in their early days. Let them acquire the thrift habit as they grow up.

Fifth, remember that saving and investment go hand in hand. Avoid speculation. Shun fluctuating stocks. Put your funds as they accumulate in safe bonds or mortgages.—S. W. Straus.

12. Aids for Teachers. *Stories of Thrift for Young Americans.* Pritchard and Turkington. Scribners, New York; Chicago.

Personal Problems of the Boy Who Works. Jenks. Association Press, New York.

Literature of the American Society for Thrift. This may be obtained free of charge. Address the Society, Straus Building, Chicago.

CHAPTER FIVE

PERSONAL AND COMMUNITY HYGIENE

GENERAL CONDITIONS

1. Interest in Public Health. Within the last few years there has been developed a wide-spread interest in public health. People are becoming informed about the causes of disease, and sanitation is receiving more attention than ever before. All cities and many townships have their boards of health. Medical inspection of pupils is now common in city school systems. Special efforts are being made to give the people a knowledge of the laws of health and the best of means for preventing disease.

Every teacher should be informed upon the subject of hygiene. In Vol. III, Chapter VII, *Sanitation and Hygiene*, we have discussed this subject so far as it relates to the daily routine of the schoolroom. In this chapter we wish to consider those measures which are of permanent value to the pupils and the community, and which are far-reaching in their effect.

2. Standard Set by the School. One of the most valuable services that the school can render the community is to maintain a high standard of hygiene. This is not only the privilege of the school; it is its duty, for the following reasons:

First, good health is the birthright of every child, and the school should maintain such conditions as will preserve this birthright.

Second, the school is expected to set an example which the patrons should feel it worth while to follow.

Third, because the community needs education in the principles and laws of hygiene. The country, of all places, should be the most free from disease, yet because of the violation of the rules of public health, sickness and death are often more prevalent than in large centers of population where these rules are strictly enforced. Many of these rural communities have low hygienic standards. Frequently families give little or no consideration to protecting from pollution water used for household purposes, or to the disposal of human and animal waste. Good authorities assert that sixty per cent of the wells in rural communities are polluted. Children grow up in the belief that earache, toothache and numerous other ills are to be expected and endured as a part of their lot in life. Examination of the hygienic conditions of some communities has shown that fully eighty per cent of the children drink tea and coffee, and that more than twenty per cent have frequent headaches. Over 400,000 of the rural population of the United States die yearly from infectious diseases, and it is safe to say that a great majority of these deaths might be prevented by the observance of the laws of health.

"Public hygiene may be enforced, but personal and domestic hygiene must be taught. No law can compel citizens in times of epidemics of typhoid or cholera to boil their drinking water and cleanse food that is eaten without cooking, but persistent warnings from health authorities, public lectures, and literature from newspapers and physicians and periodical discussion will be of greatest service in combating the spread of disease."

It may not be possible for the school to change the habits of living of the older members of the community, but it lies within the province of every school to establish among

its pupils such standards of health as will lead the men and women of tomorrow to live under better hygienic laws.

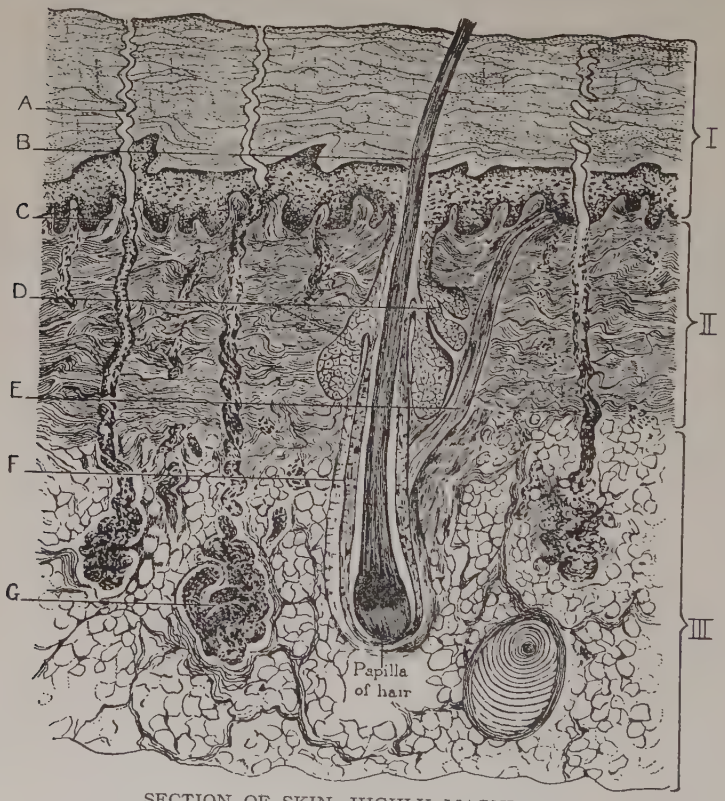
"If it should ever come to pass that every pupil in the public schools should be brought naturally to a proper understanding of health and its relations to every other part of life and conduct such a chance for the advancement of the human race would be given as no considerable section of society has yet ever had."

3. Lesson Material. In selecting lesson material under each topic the teacher should be careful not to choose topics beyond the capacity of the class. To illustrate, the lessons on skin, food, breathing, etc., are suitable for all grades, but only the leading facts and laws should be dwelt upon in the intermediate grades, while a more comprehensive study should be given these subjects in the grammar grades. The cause and prevention of contagious diseases is a subject for the grammar grades, except that the general laws of health which indirectly touch upon this subject should be taught in all grades. In all cases make the lessons plain and practical. Let your teaching of these subjects be characterized by sound common sense. Avoid fads and fancies, and lead the pupils to look upon these lessons as something that will contribute to their welfare and the welfare of their homes, but avoid such presentation of subjects as may lead sensitive children to become morbid. Teach that health is the natural condition of life, and that if we live in accordance with natural laws we shall have health and happiness.

The topics here suggested should be considered when the regular work in physiology leads up to them. If there is no regular class in physiology in the grammar grades they should be given as special lessons. The subject is vital and should not be overlooked.

4. The Skin and Its Functions. Every text-book on physiology gives a description of the skin, therefore such a description is not necessary here. Everyone knows that the skin is a protecting organ, but only a few realize its

value as an eliminating organ. The skin of an average sized person has an area of about seventeen square feet, and contains about two and a half million sweat glands. These glands are the outlet of a drainage system through



SECTION OF SKIN, HIGHLY MAGNIFIED

I, Epidermis; II, dermis; III, underlying fatty tissue. A, duct of sweat gland; B, hair; C, papillae of dermis; D, oil glands; E, erector muscles of the hair; F, hair follicle; G, sweat gland.

which a large amount of waste matter is removed from the system, and when they fail to perform their full function the work is thrown upon the kidneys and other organs, often so overworking these organs that they become

inflamed and possibly diseased. The importance of the action of the sweat glands in the preservation of health should be explained and emphasized in the intermediate and grammar grades in connection with lessons on the care of the skin.

5. Care of the Skin. (a) CLEANLINESS. While at their play children become overheated and perspiration flows freely from the glands, appearing in the form of drops of salty water on the face, hands and body; but perspiration is in progress at all times, although it may not be sensible to the eye. When the waste matters are allowed to accumulate upon the skin, they become not only injurious to the person but offensive to his neighbors. Accordingly, a teacher not only has a right, but it is also her duty, to insist on bodily cleanliness on the part of all her pupils.

There should be in connection with every schoolroom a place where the pupils may wash and dry their faces and hands when they come in from their play, or to which may be sent any who are not fit associates for the others. In default of other arrangements, a simple washbowl and pitcher or pail, with a clean towel, will answer the purpose. From what has been said, however, it is evident that the dirt of the playground is less injurious and less offensive than that which accumulates through carelessness or neglect of parents at home.

(b) BATHING. In many of the better equipped schools of the cities there are now shower baths or tub baths which the pupils may use under certain restrictions, but in a majority of schools it is impossible for the teacher to require at school or even to compel at home that which she knows to be a necessity for the health of her pupils. However, a great deal may be done by general talks in her school or by kindly private interviews, if she is tactful and understands the situation.

Personal cleanliness demands at least one thorough bath in warm water each week, and this should be taken just before retiring time, or when the person can remain indoors

quietly for an hour or so thereafter. Just before or just after a meal is not a proper time for such a bath.

There is no better tonic for the whole system than a cold bath, if taken under right conditions and at the right time, namely, in the morning, as soon as one rises from bed. It will not often be the case that pupils live so that they can take the cold-water plunge, and in many cases it seems almost impossible for them to get the proper cold bath in the morning; yet this is a thing worth advising and advocating, especially with boys and girls of the upper and intermediate grades. Besides stimulating the action of the skin and awakening the mind, it serves as a wonderful physical corrective for unwholesome tendencies that are apt to develop at the age of puberty.

If the home conditions are such that pupils cannot take a full cold bath, they very often can bathe the head, throat and chest in cold water every morning. They may not enjoy doing this at first, but after a time they will learn to enjoy its invigorating effects. This habit of bathing is especially valuable in the fall, winter and spring months, as its tendency is to prevent colds in the head, throat and lungs. If the children can be taught to take this bath and not unnecessarily to wrap up their throats and cover their ears, they can pass through the season almost wholly immune from colds. All cold baths should be followed by brisk rubbing with a towel to dry the skin and stimulate the circulation. If after that the skin is rubbed with the hands, it is even better and more invigorating.

Cautions. (1) That the most beneficial results may be obtained from a cold bath, one should leave the water while under the reaction that follows the sensation of cold caused by bringing the skin in contact with the water. If the bath is prolonged beyond this point one may be cold and chilly for hours.

(2) Delicate persons who have not been accustomed to cold baths may not be able to withstand at first a cold plunge or shower, or even a cold sponge over the entire

body. They should begin by bathing the head, neck and shoulders in cold water, and then extending the sponge to other parts of the body until they have become accustomed to it. In a few days they will be able to enjoy and find comfort in a cold sponge; and, later, a daily cold plunge.

6. Clothing. The clothing of children often is as unhygienic as it well can be, and the wise teacher will note faults and try to correct them whenever possible, always remembering that children and parents are often sensitive on the subject, particularly when there are any evidences of poverty or neglect. In every school the teacher will find in the winter months some children who really have not clothing sufficient to keep them warm, and if it is impossible to change this condition, she should favor these less fortunate pupils in the seating and in special care during inclement weather.

(a) Clothing for Protection. The amount of clothing required in the schoolroom and that required out-of-doors will vary decidedly during the cold weather, and the teacher should be watchful that children take off in the schoolroom those wraps which they will need only out-of-doors. This is particularly true of waterproof clothing, rubbers and overshoes. These should always be removed as soon as the children come indoors and never worn during the session. Damp clothing is always more or less dangerous to anyone if worn during the session. It does not injure a person to get his clothes wet or to let them dry upon him if he is in active exercise, but to sit quietly in damp clothing is a very practical way of taking cold. The teacher will notice in wet weather and snowy times that the feet of some of the children are not properly protected, and will, if possible, give an opportunity to those whose shoes are worn or thin-soled to dry their feet. The teacher may remember, however, that the boys are fullblooded and lively and keep warm in their active games at recess and noon time, and that they are much less liable to feel changes in temperature than are the girls of the same age.

(b) Cleanliness. It is highly important that the clothing should be clean, and if it has been worn so long as to be offensive — and this is frequently the case — the teacher must interfere in the interests of her other pupils, if for no other reason, for dirty clothing, charged as it is with impurities of the body, is an ever-present force in vitiating the air.

(c) Tight Clothing. At no time of life is loose clothing more necessary, for not only do the body and limbs need every opportunity to move freely, but it is essential that circulation should be in no way impeded, if growth and development make their natural progress. It is sometimes almost impossible to make parents realize the dangerous effects of tight clothing. On the whole, they are more apt to dress boys properly than girls, because the more aggressive and active nature of the former compels some recognition of their right to physical freedom, while the idea that the girls must look well often results in such a style of dress that, perhaps without knowing the reason, they are made fretful, irritable and less able to meet the demands made upon them in this wonderful growing period.

(d) Underclothing. For most people woolen underwear is the most desirable in temperate and cold climates. Wool is a poor conductor of heat, and prevents the escape of heat from the body, which is as necessary as the prevention of the access of cold air to the skin. Wool absorbs moisture readily and allows it to evaporate slowly. For these reasons woolens are well suited to the maintenance of an even temperature of the body. Wool, however, irritates the skin of some people and in such cases it is usually wise to find a substitute.

Cotton is a better conductor of heat than wool. It does not absorb moisture as readily and permits it to evaporate more quickly, consequently underwear made of ordinary cotton fabrics is not desirable; but when made of loosely woven or knit fabrics, cotton undergarments form an excellent substitute for those made of wool. Silk garments are excel-

lent but too expensive for ordinary use, and linen is not suited to the maintenance of an even temperature.

In cold weather, undergarments should protect the extremities as well as the trunk. The practice of so clothing children as to leave the arms and legs without proper protection is not only cruel but dangerous, for undue exposure of the extremities is liable to cause disease of the vital organs.

(e) Shoes. Shoes with pointed toes and high heels should never be worn by children, and the majority of adults would be more comfortable if they avoided them. The sole of the shoe should be shaped to the foot, otherwise corns, bunions and other deformities of the feet soon appear to torment their possessor. Shoes which deform the feet are worn because of the dictates of fashion. Teach the children to regard questions of style from the view-point of health and good sense. It is better to be called "old-fashioned" for a season, if need be, than to be crippled for life.

7. Food. Food is required to furnish the growth and repair of the tissues, to produce heat and to furnish energy. Any substance which supplies the body with these needs without injury is a food. It is our purpose here to discuss a few vital facts and principles pertaining to foods and digestion which school physiologies touch upon but lightly.

8. Classification. Foods are classified into proteins, carbohydrates (starches), hydrocarbons (fats) and minerals. Each class has its part in nutrition, and an understanding of the contribution which each class of foods makes towards maintaining the human system in a normal condition of health and strength is of great value to everyone, consequently these facts should be emphasized in teaching physiology.

(a) Proteins. Proteins are the tissue-building foods and no other class of foods can take their place. Lean meat, the white of eggs, the casein of milk and the gluten of wheat flour are good illustrations. Beans, peas and other

seeds of pod-bearing plants also contain protein. For this reason beans and peas have been styled the "lean meats of the vegetable kingdom."

STARCH GRAINS FROM POTATO, HIGHLY MAGNIFIED

(b) Carbohydrates or Starches. The starches constitute the largest proportion of our food. They are both heat and energy producers. Starches and sugars are usually classified together, because starch must be changed to sugar before it can be digested. Vegetables and cereals are the best representatives of this class of foods. Wheat is the most valuable of these, and wheat flour is used in the greatest variety of ways of any starch food. Rice is the principal starch food in the east and sugar is used more extensively in the United States than in any other country.

(c) Hydrocarbons or Fats. Butter, fat meat, oils and nuts are the best examples of this class of foods. They contain a large proportion of carbon, and their chief function is to supply the fuel necessary to the maintenance of bodily heat.

(d) Minerals. Water and salt are the chief mineral foods, though small quantities of iron, phosphorus and some other minerals occur in the human system. About two-thirds of the body is water, and we need to take into the system two quarts of water a day to supply the demand caused by waste and the consumption of this fluid by the tissues and blood. With the exception of water, the min-

erals necessary are supplied through the foods eaten in an ordinary diet. Salt is usually added for flavor, and some authorities claim that the system would obtain enough salt without this addition. Be this as it may, it is doubtless true that many people eat more salt than the system normally requires.

9. The Balanced Ration. The system needs daily a certain quantity of each class of the foods described in the foregoing paragraphs, and the best state of health is maintained when the supply of each class just meets the demand. Extended experiments have been made to determine the proportions of protein, starch and fat which should enter into a well balanced ration.

The heat-producing value of a food is measured by the *calory*, which is the amount of heat required to raise the temperature of one pound of water four degrees Fahrenheit, or in metric measurements, the heat required to raise the temperature of one kilogram of water one degree Centigrade. Measured by this standard we find the following heat values for the various classes of food, one gram being taken as the unit:

Protein,	4 calories
Starch,	4 calories
Fat,	9.1 calories

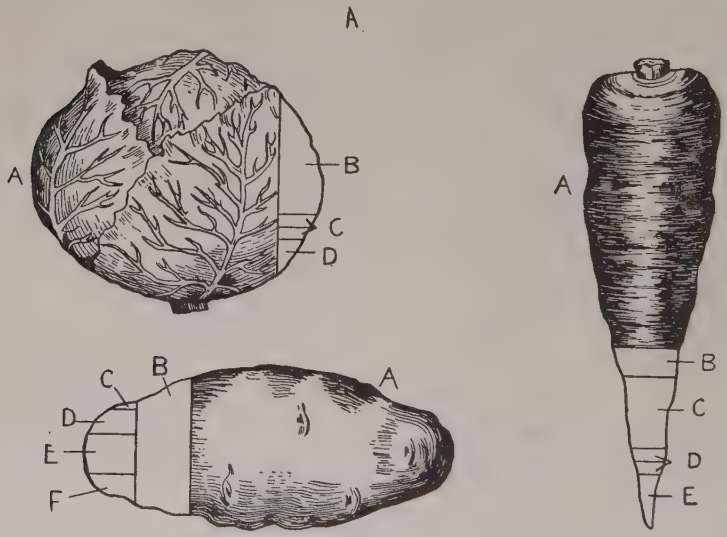
The combined results of all experiments show that the following proportions are best suited to the ration of the average individual:

Protein,	4 ounces
Fats,	2 ounces
Starches,	14 ounces
Water,	2 quarts

A deficiency of starch may be supplied by an excess of sugar, but we cannot replace protein by any other form of food stuff. One-fifth of lean beef is protein, therefore to obtain four ounces of protein from beef one must eat twenty ounces of beef. To obtain it from beans would require sixteen ounces of beans. A little over two ounces

of fat meat and about seven ounces of wheat bread will supply the required quantity of fat and starch respectively.

We can readily see that a ration composed partly of beef and partly of beans with the proper quantities of fat and starch food added is a more desirable ration than one containing either of these ingredients to the exclusion of the other. Those who understand the chemistry of foods and the daily requirements of the system so prepare their meals as to have them contain a pleasing variety of dishes, and at the same time provide the required amount of the different classes of food stuffs.

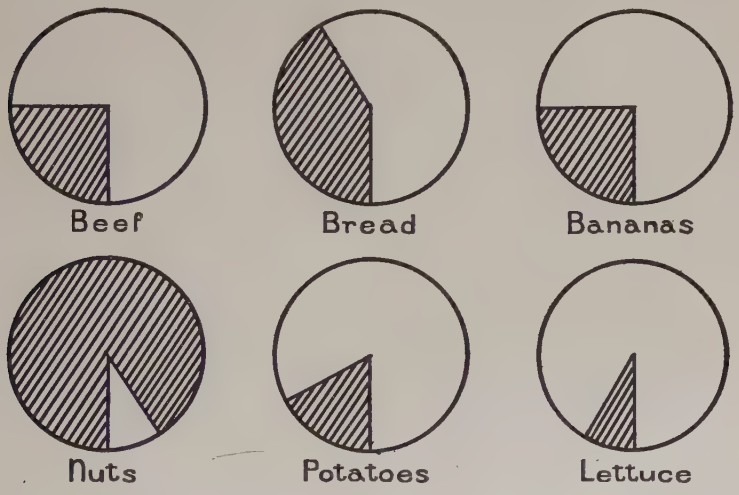


COMPOSITION OF POTATO, CABBAGE, CARROT
Potato: A, water; B, starch; C, fat; D, fibre; E, protein; F, ash.
Cabbage: A, water; B, starch; C, protein; D, ash.
Carrot: A, water; B, starch; C, sugar; D, protein; E, ash.

Caution. While the average ration here given furnishes a good foundation upon which to base a study of diet, we should remember that we cannot depend wholly upon averages. In all discussions of the problem of diet the individual should receive due consideration. A diet suited

to *B* may not under the same conditions be equally suited to *C*. Faddists and reformers frequently overlook this important fact when arguing for the adoption of their plan by a family or a community.

This caution is not given for the purpose of deterring the teacher from entering upon a thorough discussion of the problem, but simply to call attention to an important fact that should not be overlooked. When one's system is in a normal condition the natural (not perverted) appetite is usually a safe guide to follow in choosing one's diet.



FOOD VALUES
The shaded portion indicates the amount of nourishment, the white portion indicates waste.

10. Relative Nutrition in Foods. There is much popular error in regard to the nutrition yielded by various articles of food. The food value of any substance depends not only upon the amount of nutriment it contains, but also upon its digestibility. Of two articles of food containing an equal quantity of protein that one which is the most completely digested yields the greatest quantity for nourishment. Fish is not so nutritious as meat and it is more

difficult to digest. It is popularly considered a brain food because it contains phosphates, but there are more phosphates in meat than in fish, and more in grains than in meat. Only one-fifth of the potato is starch and nearly four-fifths are water. About nine-tenths of cabbage and carrots are water. The proportions of water in other vegetables are about the same. Beans and peas are valuable foods because they contain protein. Nuts are among the most valuable foods. A pound of pecan meats contains twice as much fat as a pound of ham, and the nuts are much more easily digested if they are properly masticated. Beef tea and the various extracts of beef on the market make palatable beverages, but they contain almost no nutrition. The diagrams show the relative amount of nutrition in a number of the most common articles of food. Every teacher should know and teach these facts since food sustains such a vital relation to health.

11. Digestion. A good digestion is essential to health. When the digestion becomes impaired all the other functions of the body are affected, therefore certain fundamental laws of digestion should be thoroughly taught. Among these are:

(a) Mastication. Rapid eating with its attendant lack of the proper mastication of food is a common fault of the American people. It is usually more noticeable among children than among adults. At the noon recess the children are so anxious to go out and play that unless restrained by the teacher they bolt their food. Digestion begins in the mouth with mastication and in salivation, but in most instances the work which the salivary glands and the teeth are designed to do is thrown upon the stomach. If the habit of thoroughly masticating the food can be established in childhood it is more than probable that it will continue through life. Providing warm lunches at school is an important step towards this end. But, even without this incentive, the teacher can do much by instruction and example towards establishing right habits of eating.

(b) Exercise. During digestion the stomach requires a large supply of blood, and anything which withdraws the blood from that organ interferes with its work. Violent exercises should not be taken just before or just after eating. This rule applies to mental as well as to physical exercise. Let the last period before the lunch hour be devoted to work which will not require the pupils' most strenuous effort, and after lunch encourage the children to engage for a short time in quiet games. Teach the necessity of following this rule through life if they would escape the serious consequences of indigestion.

(c) Fatigue. Fatigue of body or mind exerts a strong influence over digestion; one should not eat heartily when weary. A small quantity of nourishing food which is easily digested, however, is beneficial, since the nourishment supplied enables one rapidly to recover one's normal condition.

(d) Mental Condition. People who fret and worry and those who are habitually melancholy are, with rare exceptions, dispeptics. All care should be banished at meal time and the hour should be spent in cheerful, restful conversation. We frequently attribute a melancholy disposition to dispepsia, but in most cases we should be nearer right if we turned our statement about. Melancholy is more frequently the cause than the result of dispepsia. A cheerful disposition is essential to happiness, and the teacher should cultivate such a disposition and assist her pupils to do the same.

12. Condiments. Highly seasoned food not only perverts the taste but it also irritates the mucous membrane of the stomach and intestines. Thorough mastication develops flavors in common articles of food that those who bolt their food never dream of, and those who allow sufficient time for masticating their food seldom relish that which is highly seasoned. The body requires a certain amount of salt; a portion of this is supplied in the food itself, the remainder is added as seasoning and in most cases more

salt is used in this way than is necessary to supply the needs of the system. Spices in any form should be used sparingly, if at all, and if people were guided by the natural demands of the body in selecting their food most of the manufacturers of sauces and other highly seasoned preparations would be compelled to go out of business by lack of patronage. Dr. Sadler in his *Science of Living* makes the following objections to the use of condiments:

1. Thorough mastication of the food yields natural food flavors and renders the use of condiments both unnecessary and undesirable.

2. Condiments pervert and blunt the sense of taste — Nature's monitor of digestion — the great regulator of metabolism.

3. They create an inflammatory thirst which water cannot quench. Alcohol is able to quench this inordinate and unnatural thirst at once. In many cases, condiments may be truthfully called the real ancestors of drunkenness.

4. They inflame and irritate the digestive mucous membranes. Mustard produces something like the same effect on the inside of the stomach that it does on the outside.

5. They all have a tendency to produce a catarrhal state of the stomach and bowels when their use is long continued.

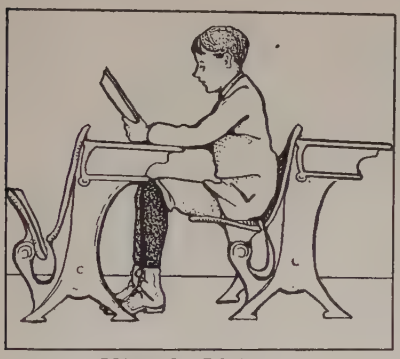
6. While they may increase the quantity of the saliva and gastric juices, they invariably decrease the quality, as the fluids they produce are largely mucus, designed to protect the mucous membrane from irritation.

7. By over-flavoring, they lead in many cases to over-eating.

8. In general, it is a safe plan to avoid all flavoring substances which "taste hot when they are cold."

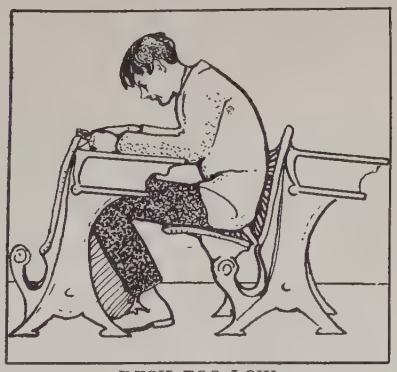
13. Breathing. Air should enter the lungs through the nasal passages, but every teacher will discover among her pupils one or more "mouth breathers." When these are discovered the teacher should as far as possible ascertain the cause and try to have it removed. Among the causes of mouth breathing are adenoids and other growths in the nostrils, and catarrhal affections. Unnatural growths can be remedied only by a surgical operation, and whenever this is necessary parents should be urged to have it performed, for breathing through the mouth endangers the health. Many more disease-bearing microbes enter the system in the air inhaled through the mouth than through the nos-

trils. In cold weather the air taken into the lungs through the mouth reaches them at a lower temperature than when inhaled through the nose. Mouth breathing leads to tonsilitis, bronchitis, catarrh and sometimes to pneumonia. Moreover it affects the general health of the child and sadly interferes with his progress in school. Many pupils who were considered stupid have outdistanced their classmates when their adenoids were removed.



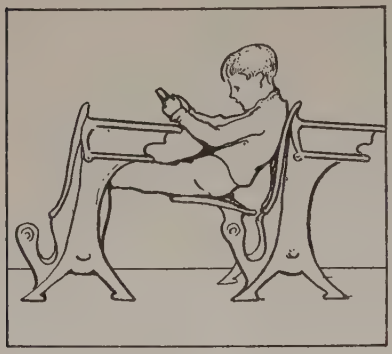
CORRECT POSITION

(a) Posture. An erect posture, both when sitting and standing, is essential to correct breathing. Children from ten to fifteen are liable to form slouchy habits of sitting and standing unless these are guarded against by their elders. The teacher should be constantly on the watch for these tendencies. When the pupil bends forward in his seat he prevents the full expansion of the chest and keeps the lungs from receiving their normal quantity of air at each inspiration. The accompanying illustrations show the correct position which the pupil should always maintain in his seat, also the position when the desk is too low. This position is unhygienic because it contracts the chest and restricts free breathing, and because it tends to make one stoop-shouldered. The third position is slouchy. It causes an unnatural strain on the spine and



DESK TOO LOW

prevents the pupil from doing his best work. This position is very common, especially among boys, and the teacher should watch for it and see that it is corrected. Train pupils to sit erect and to stand erect when reciting. By constant training they will make these postures habitual.



SLIPPED DOWN IN THE SEAT

(b) Clothing. Any stricture of the waist which prevents the free action of the intercostal muscles and the diaphragm prevents the normal quantity of air from entering the lungs. Since this quantity of air is necessary for purifying the blood these strictures are injurious to the system. Clothing should be suspended from the shoulders and not from the hips if proper respiration is to be maintained. Sometimes a few hints accompanied by explanations on the part of the teacher will secure needed reforms in this matter.

(c) Breathing Exercises. At least one breathing exercise should be given during each forenoon and afternoon session. Open the windows, have the pupils stand in the aisles with hands at the side. Inhale slowly, raising the arms in front to a horizontal position and rising on the toes; exhale slowly, resuming former position. Repeat the exercise four or five times. The last time exhale quickly. This exercise allows the pupils relief from a sitting position, fills the lungs with fresh air and sends the blood through the veins and arteries with renewed vigor. It need not occupy more than three minutes, and the pupils will work enough more rapidly to more than make up for it. (See Volume III, page 274, *Physical Exercises*.)

(d) Colds. The chief causes of colds are over-heated rooms, too much clothing, breathing impure air, and general

debility. Lack of sufficient clothing, undue exposure and a sudden drop in temperature are occasional causes. The old adage "An ounce of prevention is better than a pound of cure," is particularly applicable to colds. People who live in the open or in well-ventilated houses and keep the body in a vigorous condition are seldom afflicted with colds. Cold baths are one of the best preventives and those who take a cold bath daily are practically "cold proof." Teach the pupils the causes of colds and how to avoid taking cold.

14. Brain and Nerves. The nervous system is the channel of communication between man and his maker. The brain is the citadel of will, reason, judgment and choice; it is the sanctuary of the moral nature, the dwelling-place of the conscience and the abode of the spiritual emotions.— Sadler.

The nervous system is the most delicate and complex structure in the body, likewise it is the most sensitive to external influences. Stimulants, narcotics and drugs of any sort show their effect upon the nerves sooner than any other tissues. Nervous tissue changes more slowly than the other tissues. It can and usually does withstand an abnormal strain from overwork or even disease for a long time, but when it breaks down an equally long time is required to restore it to its normal condition. For these reasons the health of the nervous system should be carefully guarded. Irreparable injuries are often wrought through ignorance which the lessons on hygiene in the school should overcome. The following essentials should receive careful attention:

(a) Pure Blood. The brain and nerves require a larger supply of blood for their nourishment than any other organs in the system. If for any reason the supply is diminished or the quality of the blood is impaired, the nervous system suffers from lack of nourishment. Anything therefore, which affects the blood affects the nervous system. Nutritious food, perfect digestion, fresh air, deep breathing are all necessary to the health of brain and nerves. We see, therefore, that we are indirectly contrib-

uting to the health of the nervous system by all that we do to keep the body in a vigorous condition.

(b) Physical Exercise. Physical exercise is necessary not only because it invigorates the system as a whole, but also because it affords mental diversion, which is a rest for those parts of the brain that become fatigued by continuous mental labor. The old adage, "All work and no play makes Jack a dull boy," is physiologically as well as philosophically sound. In our chapters on *School Management* in Vol. III, we have spoken of the value of play, and in Vol. III, Chapter XI, we give directions for systematic physical exercises, all of which are valuable in providing the necessary exercise and recreation for the pupils.

(c) Mental Exercise. The brain, like all other organs, gains strength by exercise. What sort of mental exercises should receive special attention in the different grades and those that should be touched upon lightly are carefully set forth in this volume in the chapter on *Psychology* by Dr. Bagley. That chapter should be read in connection with this topic, since following the directions there given may save the teacher from attempting lines of work for which the pupils are not prepared.

Children seldom suffer a nervous breakdown from school work. When such a misfortune befalls a pupil it can usually be traced to other sources. The school work, under those conditions, may contribute to the breakdown, but without the other causes it would not have produced any harmful effect. Children's minds are active and the right sort of mental work is highly beneficial during the school period of life. Children below the grammar grades should not be expected to study out of school hours, and the outside work required of those in the seventh and eighth grades should not exceed one hour per day. Children are not liable to suffer from overwork so much as from the wrong kind of work. To illustrate, the study of formal grammar in an intermediate grade leads to discontent and worry on the part of the pupils because it calls for the

exercise of reasoning powers which the pupils of this grade do not yet possess. Educational misfits are the cause of much nervous irritation among school children, and this is a strong argument for requiring a thorough knowledge of child psychology as an essential part of every teacher's preparation.

(d) Excitement. During childhood the will has only slight control over the emotions and all children are easily excited. Enthusiasm is desirable, but undue excitement should be avoided since it is accompanied by a large expenditure of nervous energy. Those children who are specially sensitive should be watched, since they are more easily excited than the others. Strenuous games and vivid descriptions may injure rather than benefit such children, and it is usually wise to discourage their taking part in the games and to excuse them from giving such descriptions. Under the right sort of encouragement and guidance sensitive children will, in a great measure, overcome this condition. Moreover, the wise teacher will exert her utmost influence to sooth angry passions and to allay strife, not by punishment but by leading her pupils to fix their attention upon better things. Undue excitement irritates the nerves and should be avoided.

(e) Sleep. Sleep is the great restorer of the nervous system. We become drowsy because we have drawn upon our nervous energy to such an extent that a new supply is needed, and when the warning comes it should be heeded. Children require more sleep than most adults and it is unwise to deprive them of the amount which Nature demands. "Early to bed" is a good maxim for children, but "early to rise" is not always so. Most children of school age require at least nine hours sleep, though some may not need more than eight hours. The average amount of sleep for adults is eight hours, some require more and some require seven hours or even less. It is an error to suppose that time spent in sleep is wasted, for during sleep the brain and nerves gather the store of energy essential

to clear thinking and accurate movement. Without the necessary amount of sleep one's work is seldom satisfactory. Moreover, the lack of proper rest causes the individual to become irritable and disagreeable. The teacher who fails to secure her requisite amount of sleep is seldom successful. She is liable to be the chief source of disorder in her schoolroom, and inability to think clearly makes her work in the recitation uninteresting to the pupils and unsatisfactory to the patrons.

DISEASE AND ITS PREVENTION

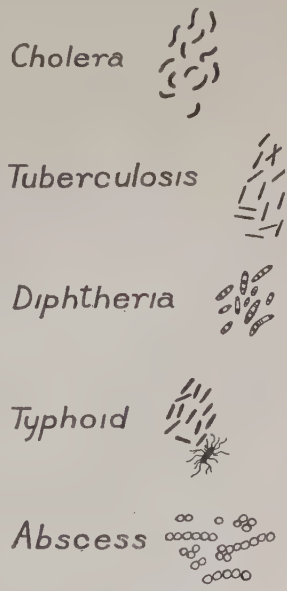
15. What Disease Is. When any organ in the body fails to perform its function we speak of the condition as sickness or disease. Most of our common ills, such as indigestion, headache, colds, sore throat and the like are caused by eating too much, eating indigestible food, breathing impure air and exposure. The body will usually cure itself of these ills if the person removes the cause and remains quiet for a day or two. There are other diseases, however, of a more serious nature that are caused by the introduction into the system of certain germs, whose growth affects the functions of certain organs and also produces poisons medically known as *toxins*. Practically all germ diseases are infectious and the teacher should know how they are caused and how they may be prevented.

16. Bacteria. The air we breathe, the water we drink and the food we eat contain myriads of minute organisms known as *bacteria*. They are so small that they cannot be seen except under a microscope that magnifies 600 or 1000 diameters, and even then some of them appear as tiny spots. Some are plants and some are animals. Most bacteria are beneficial and we could not live without them. Those which contribute to our welfare feed upon dead matter and destroy it. Without them the earth would be so filled with the accumulation of dead plants and animals that there would be little or no room for living things. These bacteria sour milk, cause fermentation, give flavor to

butter and cheese, prepare the soil for the growth of plants and do many other things that contribute to our welfare.

BACTERIA FROM SCRAPINGS FROM THE TEETH

But there are other sorts of bacteria that are injurious and their presence in the system is liable to cause disease. These bacteria feed upon living matter which they destroy. In their process of growth and decay they produce the poisons mentioned above. These poisons are absorbed into the blood and when they exceed the quantity that the blood can neutralize, disease follows. Disease-producing bacteria take several forms and each form has a specific name. The rod-shaped are known as *bacilli*; those which are curved or spiral, *spirilli*; those that are spherical, *cocci* or *micrococci*. Some have minute slender hairs attached to them, and the motion of these hairs moves the organism through the fluid in which it lives.



BACTERIA

The effects of disease-producing bacteria may be divided into three classes, as follows:

(1) Local effect upon tissues, as in the growth of the membrane in the throat in diphtheria, and the formation of ulcers in the intestinal canal in typhoid fever.

(2) Mechanical, as in the stoppage of a blood vessel by the ac-

cumulation of bacteria at some point. This may occur in cases where the valves of the heart are infected. Small masses of the bacteria slough off into the blood and are carried by the circulation to a small blood vessel through which they are unable to pass. A new infectious growth is started at this point which may result in an abscess.

(3) Poisoning; the growth of bacteria develops poisons which attack the tissues and greatly impair their functions or destroy them altogether.

17. Infectious Diseases. Scarlet fever, small pox, diphtheria, measles, mumps and a number of other diseases are said to be "catching" because those coming into the presence of a person suffering from one of these diseases is liable to become infected with it. The infection is caused by taking into the system germs given off by the one who is ill. These germs may be given off by the breath, as in diphtheria and tonsilitis; through discharges from the mouth and nostrils, as in sneezing, coughing and spitting; through discharges from the bowels, as in typhoid fever, by pus discharged from ulcers, by actual contact with the sick person and by flies and mosquitoes. Epidemics of diphtheria, scarlet fever and measles, so common among children, are caused by the conveyance of the disease germs from one home to another throughout the community. Rural communities seldom understand how infectious diseases are caused, and, consequently, do not know how to prevent them. Such knowledge is invaluable to any community and the facts pertaining to infectious diseases should be so strongly presented to the pupils of every rural school that they will be influenced through life by this teaching.

18. Prevention of Infectious Diseases. A knowledge of the causes of infectious diseases is the first essential to the prevention of an epidemic, and good health is the first essential to their prevention by the individual. The facts here presented will serve as guides in teaching this subject.

(a) How Bacteria Enter the System. Disease germs enter the system through the mouth into the alimentary

canal, through the mouth and nostrils into the lungs and through breaks in the skin into the blood.

(b) Sources of Bacteria. Impure air, water and dust are the principal sources of bacteria which enter the system.

Water. Germs of typhoid fever and diphtheria are found in large numbers in water polluted by decaying animal and vegetable matter, or by animal and human waste. Rivers into which sewage empties carry these germs long distances, and towns using the water are subject to frequent outbreaks of these diseases.

WELL POLLUTION

Many farm wells are so located that water seeping through layers of sand and gravel polluted by drainage from barnyards and outhouses enters them. The water from such wells is often a prolific source of typhoid and diphtheria. Some springs are polluted in a similar manner and when there is reason for suspecting the purity of water it should be subjected to chemical analysis, which will be made free of charge by the agricultural experiment station of the state or by the Board of Health. As long as the water is under suspicion it should be boiled since boiling will kill all germs that it may contain. One should not be deceived by the appearance of water since the most sparkling water may be the most dangerous.

Air. Impure air, especially air that has been breathed over several times is filled with disease-bearing germs, most of which cause diseases of the air passages and lungs, such as colds, tonsilitis and sore throat. Rooms occupied by audiences should be thoroughly ventilated before they are occupied again. The doors and windows of the schoolroom should be thrown open every night and left open until the air has been entirely changed. Sleeping and living rooms should be similarly ventilated every day.

Dust. Dust is one of the most prolific sources of disease germs. The dust which accumulates in dwellings,

WELL PROPERLY LOCATED

assembly halls, churches, schoolrooms and all other enclosures occupied by any number of people contains bacteria that have been expelled by the breath, and millions of particles of decaying organic matter. No one can breathe air filled with this dust without inhaling these germs. Sweeping with a common broom should be avoided whenever possible, and if the broom must be used some means for preventing the dust from rising should be employed. Walls, floors and furniture should be kept free from dust, which should be removed with a damp cloth. Any implement, such as the feather duster, which removes dust from one place merely to let it settle in another, should not be used.

(c) Resistance of the Body. In state of health, the human body is able to fight disease-bearing bacteria and in most cases to destroy them before they produce any injurious effect. The best way therefore to protect oneself is to keep in robust health, but this will not wholly protect one against taking some of these diseases. It is, therefore, wise to keep away from one suffering from a contagious disease, but this cannot always be done, owing to one's duty to the sick.

(d) Pure Blood. One of the chief functions of the white corpuscles in the blood is to destroy disease germs. Whenever an injury occurs to the skin, an extraordinary supply of these corpuscles is rushed to the injured part by the blood and they surround the germs that get into the wound. This is the chief cause of the swelling accompanying a bruise or other injury. The corpuscles themselves are killed in destroying the germs, and sometimes there is such an accumulation of dead white corpuscles as to form an ulcer, or boil. These corpuscles attack the germs in the blood in the same way and destroy them. So long as the blood has an ample supply of white corpuscles one is practically safe from attacks by disease-producing bacteria. Whatever reduces the number or weakens the vitality of the white corpuscles weakens one's power of resistance to germ diseases, therefore great care should be taken to keep the blood in a healthy condition. Anything that injures the blood increases one's liability to disease.

(e) Quarantine. The only way to prevent an epidemic is to prevent the spreading of the germs causing the disease. All communities have laws for this purpose, but outside of cities these laws are seldom rigorously enforced, and this is the chief reason for epidemics in rural communities. One ill with a contagious disease should be kept in a room from which all except those who nurse the patient should be excluded. Moreover, the family should be quarantined, that is, the members should be required to remain on the premises and visitors should be excluded until

danger of spreading the disease is passed. This may work some hardship to the family, but it is far better that a few be inconvenienced than that an entire community suffer.

Every teacher has a duty to perform in reference to contagious diseases. She may not be able to detect measles, scarlet fever and diphtheria in their first stages, but she will always be on the safe side if she sends home a child who has a headache and sore throat accompanied by more or less fever. A note should also be sent stating the reason for sending the child home, and requesting the parents to allow the child to stay at home until they know the nature of the illness. Children who have been out of school on account of any of these diseases should not be readmitted unless they bring a certificate from the attending physician, stating that they have fully recovered. Sometimes parents feel that these regulations are unnecessary and will try to force the teacher to readmit a pupil without a physician's certificate. In such cases the teacher should realize that she is responsible for the protection of all the pupils under her charge and that it is her duty to require the certificate. A careful explanation of her position will usually cause the parents to realize her position. This rule should be rigidly enforced. A single pupil recovering from scarlet fever and returning to school before the scales have ceased to come off the skin may transmit the disease to the entire school, since these scales contain the germs that produce the disease.

19. Suggestions and Precautions. We have dwelt upon facts pertaining to health and disease with which every one should become familiar, but in presenting these facts to children the teacher should remember that during the school period of life the feelings are stronger than the will and that imagination is not always curbed by reason. The facts should be presented in such a way as to enable the pupils to grasp them at their true value and at the same time to realize that healthy living enables one to escape most of the ills which befall those who live carelessly.

(a) Beware of Medicines. The body is so constituted that under hygienic living it will take care of most of its ills. Medicines do not and cannot cure disease, "the most they can do is to aid the body to right itself." Medicines should not be used except under the direction of a physician. The law known as the "Harrison Act" has driven from the market many harmful preparations that were formerly sold in large quantities, but there is danger still of harmful drugs being procured and used. Educate the pupils away from them.

If people used fewer drugs and more common sense, took less medicine and more exercise, wore fewer wraps in winter and spent more time out-of-doors, we should hear less about sickness, and the whole race would be more robust." [1]

(b) Simple Rules. The following rules taken from Conn's *Physiology and Hygiene* should be practised in every school and home.

(1) Do not spit on the floor or sidewalk.

(2) Do not put pencils or penholders in the mouth.

(3) Do not put the fingers in the mouth.

(4) Do not put money in the mouth.

(5) Never put into the mouth anything that another person has had in his mouth (gum, bean-blowers, whistles, drinking cups, etc.).

(6) When coughing, turn the face away from others, and avoid allowing others to cough in your face.

(7) Wash the hands and face often.

20. Stimulants and Narcotics. A knowledge of and belief in the principles of hygiene should exert a stronger influence against the use of alcoholic liquors, tobacco and drugs than will any direct teaching of the effects of these substances upon the digestive organs and the nervous system. Nevertheless we wish to call attention to a few facts and superstitions concerning them.

(a) Alcohol. Regardless of the fact that for years the effects of alcohol have been diligently taught in the schools.

[1] Conn. *Physiology and Hygiene.*

many people entertain beliefs concerning its effects upon the human system which scientific research has disproved. Among these beliefs are:

(1) That alcohol is food. The most careful experiments show that under no conditions does alcohol serve to nourish the system. On the contrary, except in very small quantities, it interferes with digestion and thus prevents the system from obtaining the nourishment it would naturally derive from the food ordinarily eaten.

(2) That alcohol gives one strength. Alcohol is no more a source of strength to a man than is a whip to a horse or goad to an ox. It is an agent for taking from a man strength already stored in his system without supplying anything in its place. Over-exertion under the stimulus of alcohol leads to a weakened condition of the system from which it may require hours or even days to recover.

(3) That alcohol is a preventive of disease. This error is accepted by a large number of people and these same people believe that any substance having a biting taste or a pungent odor will accomplish the same purpose. We have already shown that good health and pure blood are the best preventives of disease. Since alcohol impairs the use of the digestive organs and injures the blood it renders the system subject to disease. Moreover it is the direct cause of several diseases of the liver, stomach and intestines.

(4) That alcohol increases the temperature. When alcohol is first taken into the system it spurs the heart to a more rapid action than is natural, and an extra supply of blood is forced into the capillaries of the skin, causing a momentary flush, accompanied by a feeling of warmth. The reaction that follows, however, reduces the temperature of the body below the normal. Those addicted to the use of alcohol cannot withstand cold as well as those who are free from its effects, and its use by members of exploring parties in the polar regions is invariably fatal.

(5) That moderate use will not become a habit. This is the most fatal error of all. The human body is so consti-

tuted that taking into it any substance which is not a food, and which injures the blood, creates an appetite that grows with the use of the substance. Says an eminent English authority, "*The most dàngerous effect of alcohol upon the body as a whole is that it has the power to create an almost irresistable appetite for more.*" There is no exception to this rule.

(b) Tobacco. Tobacco is especially injurious to growing boys. It weakens the blood, arrests the development of the nervous system and prevents attainment to the highest intellectual power of which the user might otherwise be capable. Moreover it injures the throat and lungs and affects the action of the heart.

The law of habit is just as sure in connection with the use of tobacco as in the use of alcohol. The use of tobacco among men is so prevalent that the teacher has a difficult task to prevent the boys from contracting the habit. Probably nine boys out of ten who learn to smoke begin because they think that smoking is "manly." The teacher who can disabuse the minds of her boys of this idea will accomplish much towards preventing the use of tobacco.

(c) Drugs. The drug habit is formed in so many ways that one should be constantly on guard against it. No one intends to become addicted to the use of opium, cocaine or any of the numerous drugs that produce, when taken, a soothing effect, but many acquire the habit unknowingly by the use of mild preparations containing these drugs. The effect of all such preparations, as well as that of numerous soda fountain beverages should be explained, and a sentiment against their use created.

21. Mental States. The intimate relation of mind and body causes our mental states to exert a strong influence over our health. Mental idleness, fear, fretting, self-consciousness and worry are the causes of many ills. On the other hand a serene temperament in which the emotions are under the control of the will, contentment and a

tendency to look upon the pleasant aspects of life are conducive to health and long life.

Keep the mind peaceful and the conscience clear. All phases of fear as well as all passionate emotions in which fear is a factor, such as anxiety, envy, jealousy, grief, worry, hatred, despondency, revenge, remorse, etc.—all directly and powerfully influence the physical health through their depressing effect, primarily upon the cerebro-spinal nervous system, and reflexly upon the sympathetic nervous system.—*Sadler.*

ANALYTICAL INDEX

ANALYTICAL INDEX

The Roman numerals indicate the volume, and the Arabic the page. All references to a given topic are found under its title, and the correlated subjects are placed at the end of each department.

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THE FATE OF EMPIRE
DEPENDS UPON THE
EDUCATION
OF YOUTH
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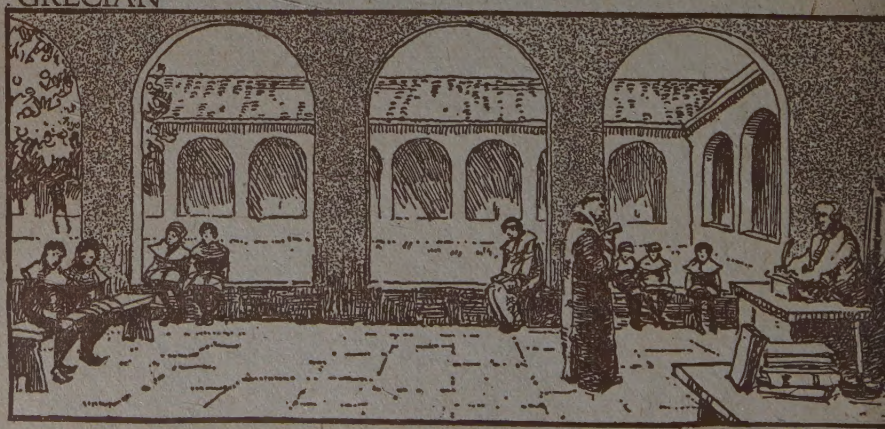

MEDIEVAL

COLONIAL

THE SECRET OF EDU CATION LIES IN RE SPECTING THE PUPIL

EMERSON

PIONEER

MODERN

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